

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

F1_HSD

NTP Study Number: C07062
Lock Date: 03/30/2012
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.1.1_001
PWG Approval Date: NONE

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 2

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63537

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
* Trachea

* Lymph Node, Mediastinal

* Nose

* Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63538

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lymph Node, Bronchial

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63542

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Mediastinal

* Nose

* Pharynx

MISSING

* Lymph Node, Bronchial

* Trachea

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lung

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63559

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
* Trachea

* Lymph Node, Bronchial

* Nose

* Pharynx

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 27

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63562

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lung

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 31

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63568

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Mediastinal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 202

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63887

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

Lymph Node, Bronchial

OBSERVATIONS

Liver
[Necrosis TGLs = 1-6]

Necrosis

Focal, Mild

* Lung

Foreign Body
Inflammation

Minimal
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 203

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63888

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 204

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63889

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 207

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63892

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Pharynx

Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 208

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63893

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 213

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63898

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Nose

Pharynx

Trachea

MISSING

Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 220

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63905

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Pharynx

Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 224

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63909

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

Lymph Node, Bronchial

Pharynx

Trachea

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 227

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63912

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 233

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63918

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Pharynx

Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 402

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63817

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Mediastinal

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 403

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63818

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 404

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63819

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Pharynx

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 407

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63822

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

Pharynx

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 408

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63823

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 413

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63828

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

Pharynx

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 420

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63835

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 424

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63839

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 427

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63842

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 433

TRT#: 5

SEX: Male

DAY ON TEST: 31

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Pharynx

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 602

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63747

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 603

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63748

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body
Inflammation

Mild
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 604

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63749

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 607

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63752

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
Pharynx

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body
Inflammation

Mild
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 608

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63753

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
Pharynx

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body
Hyperplasia
Inflammation

Mild
Minimal
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 613

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63758

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 620

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63765

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
Pharynx

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

OBSERVATIONS

* Lung

Foreign Body
Inflammation

Mild
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 624

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63769

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

PRESENT BUT NOT EXAMINED

Lymph Node, Mesenteric

OBSERVATIONS

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 627

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63772

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 633

TRT#: 7

SEX: Male

DAY ON TEST: 31

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63778

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

INSUFFICIENT TISSUE

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 802

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63677

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Mild

Inflammation

Chronic, Mild

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 804

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 807

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63682

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Moderate

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Mild

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 808

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

INSUFFICIENT TISSUE

* Lymph Node, Mediastinal

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Moderate

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 813

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63688

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Mild

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 1-3]

[Hyperplasia TGLs = 1-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 820

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63695

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Mild

Inflammation

Chronic, Mild

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 824

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63699

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Mild

Inflammation

Chronic, Mild

* Lymph Node, Bronchial

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 827

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63702

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body
Hyperplasia
Inflammation

Mild
Minimal
Chronic, Mild

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body
Hyperplasia

Minimal
Lymphoid, Moderate

[Foreign Body TGLs = 1-3]

[Hyperplasia TGLs = 1-3]

* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

[Foreign Body TGLs = 2-5]

[Hyperplasia TGLs = 2-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 833

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63708

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-3]

[Hyperplasia TGLs = 1-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 2-5]

[Hyperplasia TGLs = 2-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1002

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63607

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 2-5]

[Hyperplasia TGLs = 2-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1004

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63609

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 4-2R]

* Lymph Node, Mediastinal

Foreign Body

Mild

[Foreign Body TGLs = 2-5]

[Hyperplasia TGLs = 2-5]

Hyperplasia

Lymphoid, Mild

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1007

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63612

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 3-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1008

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63613

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Moderate

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1013

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63618

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1020

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63625

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1024

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63629

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 2-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1027

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63632

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Moderate

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 1-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1033

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63638

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 2-5]

[Hyperplasia TGLs = 2-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 102

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63572

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 104

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 108

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 113

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63583

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
* Pharynx

* Lung
* Trachea

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

OBSERVATIONS

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 120

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63590

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 124

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63594

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Lymph Node, Mediastinal

* Nose

* Pharynx

* Trachea

MISSING

* Lymph Node, Bronchial

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 127

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63597

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Lung

* Nose

* Pharynx

MISSING

* Lymph Node, Bronchial

* Trachea

OBSERVATIONS

* Lymph Node, Mediastinal
[Hyperplasia TGLs = 1-5]

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 133

TRT#: 2

SEX: Female

DAY ON TEST: 32

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 63603

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx
* Pharynx

* Lung

* Lymph Node, Bronchial

* Nose

MISSING

* Trachea

OBSERVATIONS

* Lymph Node, Mediastinal

Pigmentation

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 302

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63922

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 303

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63923

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Bronchial

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 304

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63924

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Nose

Pharynx

Trachea

INSUFFICIENT TISSUE

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 307

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63927

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 308

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63928

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 313

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63933

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Bronchial
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

OBSERVATIONS

Larynx
* Lung

Epiglottis

Metaplasia
Foreign Body

Squamous, Minimal
Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 320

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63940

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 324

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63944

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 327

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63947

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 333

TRT#: 4

SEX: Female

DAY ON TEST: 32

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63953

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body
Inflammation

Minimal
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 502

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63852

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body
Inflammation

Minimal
Chronic, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 503

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63853

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 504

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63854

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Minimal
Lymphoid, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 507

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63857

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 508

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63858

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Foreign Body
Hyperplasia

Minimal
Minimal
Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 513

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 520

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63870

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

* Lymph Node, Mediastinal

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 524

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Lymph Node, Mediastinal

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 527

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63877

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 533

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63883

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Mediastinal

* Nose

Pharynx

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 702

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63782

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 703

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63783

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Minimal

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 704

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63784

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mediastinal

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 707

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63787

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Moderate

[Hyperplasia TGLs = 2-5]

Uterus

Endometrium

Hyperplasia

Cystic, Moderate

[Hyperplasia TGLs = 1-6]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 708

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63788

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 713

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63793

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx

* Nose

Pharynx

Trachea

OBSERVATIONS

* Lung

Foreign Body

Mild

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 720

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63800

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Pharynx

Trachea

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

* Lymph Node, Bronchial

Foreign Body

Minimal

* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Minimal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 724

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63804

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung
* Lymph Node, Mediastinal

Foreign Body
Foreign Body

Mild
Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 727

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63807

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 733

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 63813

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx
Trachea

* Lymph Node, Bronchial

* Nose

Pharynx

OBSERVATIONS

* Lung

* Lymph Node, Mediastinal

[Hyperplasia TGLs = 1-5]

Foreign Body

Hyperplasia

Mild

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 902

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63712

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 903

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63713

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Moderate

Alveolar Epith

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 904

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63714

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 907

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63717

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 908

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63718

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

[Foreign Body TGLs = 3-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 913

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63723

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 920

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63730

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 3-5]

[Hyperplasia TGLs = 3-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 924

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63734

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 3-5]

[Hyperplasia TGLs = 3-3]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 927

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63737

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Foreign Body

Mild

Alveolar Epith

Hyperplasia

Mild

Inflammation

Chronic, Mild

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 933

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 63743

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

Pharynx

Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

[Foreign Body TGLs = 3-5]

Hyperplasia

Lymphoid, Moderate

[Hyperplasia TGLs = 3-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1102

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63642

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 2-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

[Foreign Body TGLs = 3-5]

Hyperplasia

Lymphoid, Moderate

[Hyperplasia TGLs = 3-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1103

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63643

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[Foreign Body TGLs = 2-2]

[Hyperplasia TGLs = 2-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1104

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63644

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 3-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[Foreign Body TGLs = 2-2]

[Hyperplasia TGLs = 2-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1108

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63648

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 4-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-2]

[Hyperplasia TGLs = 2-2]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 3-5]

[Hyperplasia TGLs = 3-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1113

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63653

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

[Foreign Body TGLs = 3-2]

* Lymph Node, Mediastinal

Foreign Body

Mild

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1120

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63660

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 3-5]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 01

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:02

First Dose M/F: 05/23/11 / 05/23/11

Lab: BNW

ANIMAL ID: 1124

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63664

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 3-3]

[Hyperplasia TGLs = 3-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1127

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63667

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body
Hyperplasia
Inflammation

Moderate
Minimal
Chronic, Moderate

[Foreign Body TGLs = 1-2+3]

* Lymph Node, Bronchial

Foreign Body
Hyperplasia

Minimal
Lymphoid, Marked

[Foreign Body TGLs = 2-3]

[Hyperplasia TGLs = 2-3]

* Lymph Node, Mediastinal

Foreign Body
Hyperplasia

Mild
Lymphoid, Marked

[Foreign Body TGLs = 3-5]

[Hyperplasia TGLs = 3-5]

Experiment Number: 07062 - 01
Test Type: 30-day
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
1020 Long Multiwalled Carbon Nanotube
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013
Time Report Requested: 12:41:02
First Dose M/F: 05/23/11 / 05/23/11
Lab: BNW

ANIMAL ID: 1133

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 63673

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Larynx

* Nose

* Pharynx

* Trachea

OBSERVATIONS

* Lung

Alveolar Epith

Foreign Body

Moderate

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

[Foreign Body TGLs = 2-2+3]

* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Marked

[Foreign Body TGLs = 3-3]

[Hyperplasia TGLs = 3-3]

* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[Foreign Body TGLs = 1-5]

[Hyperplasia TGLs = 1-5]

*** END OF REPORT ***