

Experiment Number: 20537-01
Test Type: 90-DAY
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Test Compound: Adenoviral Vector (AdhAQP1)

CAS Number: HAQP1

Date Report Requested: 10/19/2014

Time Report Requested: 17:36:55

First Dose M/F: NA / NA

Lab: MBA

C Number: C20537
Lock Date: 11/19/2007
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Male
PWG Approval Date: NONE

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 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat MALE	VEHCONTRCOHRTA	VEHCONTRCOHRTB	VEHCONTRCOHRTC	VEHCONTRCOHRTD	VEHCONTRCOHR E	2-8ADHAQP1COHTA
Disposition Summary						
Animals Initially In Study	5	5	5	5	5	5
Scheduled Sacrifice	5	5	4	5		5
Early Deaths						
Accidentally Killed			1			
Survivors						
Terminal Sacrifice					5	
Animals Examined Microscopically	5	5	5	5	5	5
ALIMENTARY SYSTEM						
Esophagus	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Cecum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Colon	(5)	(5)	(5)	(5)	(5)	(5)
Hemorrhage						
Hemorrhage, Acute, Diffuse						
Hemorrhage, Diffuse		1 [4.0]				
Intestine Large, Rectum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Duodenum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Ileum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Jejunum	(5)	(5)	(5)	(5)	(5)	(5)
Liver	(5)	(5)	(5)	(5)	(5)	(5)
Basophilic Focus						
Inflammation		2 [1.0]	3 [1.0]	2 [1.0]		
Oral Mucosa	(5)	(5)	(5)	(5)	(5)	(5)
Pancreas	(5)	(5)	(5)	(5)	(5)	(5)
Acinus, Atrophy						
Salivary Glands	(5)	(5)	(5)	(3)	(4)	(5)
Left, Parotid Gl, Degeneration	1 [1.0]					1 [1.0]
Left, Parotid Gl, Mitosis	2 [1.5]					2 [1.5]

a - Number of animals examined microscopically at site and number of animals with lesion
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Lab: MBA

F 344/N Rat MALE	VEHCONTRCOHRTA	VEHCONTRCOHRTB	VEHCONTRCOHRTC	VEHCONTRCOHRTD	VEHCONTRCOHR E	2-8ADHAQP1COHTA
Left, Sublingul GI, Regeneration						
Left, Submandibul GI, Degeneration	2 [3.0]					1 [4.0]
Left, Submandibul GI, Inflammation	1 [2.0]					
Left, Submandibul GI, Mitosis	1 [2.0]					
Left, Submandibul GI, Regeneration	1 [2.0]					1 [4.0]
Parotid GI, Right, Degeneration	1 [2.0]					
Parotid GI, Right, Mitosis	2 [1.5]					1 [2.0]
Parotid GI, Right, Regeneration						
Right, Sublingul GI, Inflammation						
Right, Sublingul GI, Regeneration						
Right, Submandibul GI, Degeneration	2 [2.5]					5 [2.8]
Right, Submandibul GI, Inflammation	1 [1.0]	4 [1.0]				5 [1.2]
Right, Submandibul GI, Mitosis	2 [1.5]					
Right, Submandibul GI, Regeneration	3 [2.0]	5 [2.0]	5 [1.0]	3 [1.3]	4 [1.0]	5 [2.2]
Stomach, Forestomach	(5)	(5)	(5)	(5)	(5)	(5)
Stomach, Glandular	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization		1 [1.0]				2 [1.5]
Tongue	(5)	(5)	(5)	(5)	(5)	(5)
Fibrosis, Focal						
Infiltration Cellular, Histiocyte, Focal			1 [1.0]			
Necrosis	1 [2.0]					
CARDIOVASCULAR SYSTEM						
Blood Vessel	(5)	(5)	(5)	(5)	(5)	(5)
Heart	(5)	(5)	(5)	(5)	(5)	(5)
Cardiomyopathy		1 [1.0]	1 [1.0]	1 [1.0]	3 [1.0]	
ENDOCRINE SYSTEM						
Adrenal Cortex	(5)	(5)	(5)	(5)	(5)	(5)
Adrenal Medulla	(5)	(5)	(5)	(5)	(5)	(5)

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: MBA

F 344/N Rat MALE	VEHCONTRCOHRTA	VEHCONTRCOHRTB	VEHCONTRCOHRTC	VEHCONTRCOHRTD	VEHCONTRCOHR E	2-8ADHAQP1COHTA
Islets, Pancreatic	(5)	(5)	(5)	(5)	(5)	(5)
Parathyroid Gland	(5)	(5)	(5)	(5)	(5)	(5)
Pituitary Gland	(5)	(5)	(5)	(5)	(5)	(5)
Pars Intermed, Hyperplasia, Focal					1 [2.0]	
Rathkes Cleft, Cyst, Focal					1 [2.0]	
Thyroid Gland	(5)	(5)	(5)	(5)	(5)	(5)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation						1 [1.0]
Preputial Gland	(5)	(5)	(5)	(4)	(5)	(4)
Prostate	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation		2 [2.0]				
Inflammation, Acute, Focal						
Inflammation, Chronic						1 [1.0]
Inflammation, Suppurative, Acute, Focal						1 [2.0]
Seminal Vesicle	(5)	(5)	(5)	(5)	(5)	(5)
Testes	(5)	(5)	(5)	(5)	(5)	(5)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(5)	(5)	(5)	(5)	(5)	(5)
Lymph Node, Mandibular	(0)	(0)	(0)	(0)	(0)	(0)
Lymph Node, Mesenteric	(5)	(5)	(4)	(5)	(4)	(5)
Spleen	(5)	(5)	(5)	(5)	(5)	(5)
Thymus	(5)	(5)	(5)	(5)	(5)	(5)
INTEGUMENTARY SYSTEM						
Mammary Gland	(4)	(4)	(2)	(2)	(4)	(4)

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: MBA

F 344/N Rat MALE	VEHCONTRCOHRTA	VEHCONTRCOHRTB	VEHCONTRCOHRTC	VEHCONTRCOHRTD	VEHCONTRCOHR E	2-8ADHAQP1COHTA
Skin	(5)	(5)	(5)	(5)	(5)	(5)
MUSCULOSKELETAL SYSTEM						
Bone	(5)	(5)	(5)	(5)	(5)	(5)
NERVOUS SYSTEM						
Brain	(5)	(5)	(5)	(5)	(5)	(5)
RESPIRATORY SYSTEM						
Lung	(5)	(5)	(5)	(5)	(5)	(5)
Nose	(5)	(5)	(5)	(5)	(5)	(5)
Trachea	(5)	(5)	(5)	(5)	(5)	(5)
SPECIAL SENSES SYSTEM						
Eye	(5)	(5)	(5)	(5)	(5)	(5)
Retina, Atrophy						1 [1.0]
Retina, Dysplasia	1 [1.0]					
Harderian Gland	(5)	(5)	(5)	(5)	(5)	(5)
Degeneration				1 [3.0]		
Inflammation				1 [3.0]		
Regeneration				1 [3.0]		
URINARY SYSTEM						
Kidney	(5)	(5)	(5)	(5)	(5)	(5)
Nephropathy						
Renal Tubule, Casts Protein						
Urinary Bladder	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization						1 [1.0]
Mucosa, Hyperplasia	1 [1.0]					

a - Number of animals examined microscopically at site and number of animals with lesion
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Date Report Requested: 10/19/2014
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 First Dose M/F: NA / NA
 Lab: MBA

F 344/N Rat MALE	2-8ADHAQP1COHTB	2-8ADHAQP1COHTC	2-8ADHAQP1COHTD	2-8ADHAQP1COHTE	8-9ADHAQP1COHTA	8-9ADHAQP1COHTB
Disposition Summary						
Animals Initially In Study	5	5	5	5	5	5
Scheduled Sacrifice	5	5	5		5	5
Early Deaths						
Accidentally Killed						
Survivors						
Terminal Sacrifice				5		
Animals Examined Microscopically	5	5	5	5	5	5
ALIMENTARY SYSTEM						
Esophagus	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Cecum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Colon	(5)	(5)	(5)	(5)	(5)	(5)
Hemorrhage						
Hemorrhage, Acute, Diffuse						
Hemorrhage, Diffuse						
Intestine Large, Rectum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Duodenum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Ileum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Jejunum	(5)	(5)	(5)	(5)	(5)	(5)
Liver	(5)	(5)	(5)	(5)	(5)	(5)
Basophilic Focus			1			
Inflammation		1 [1.0]	1 [1.0]	1 [1.0]		
Oral Mucosa	(5)	(5)	(5)	(5)	(5)	(5)
Pancreas	(5)	(5)	(5)	(5)	(5)	(5)
Acinus, Atrophy				1 [1.0]		
Salivary Glands	(5)	(5)	(5)	(4)	(5)	(5)
Left, Parotid Gl, Degeneration						
Left, Parotid Gl, Mitosis					4 [1.5]	

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Lab: MBA

F 344/N Rat MALE	2-8ADHAQP1COHTB	2-8ADHAQP1COHTC	2-8ADHAQP1COHTD	2-8ADHAQP1COHTE	8-9ADHAQP1COHTA	8-9ADHAQP1COHTB
Left, Sublingual GI, Regeneration				1 [1.0]		
Left, Submandibular GI, Degeneration					1 [4.0]	
Left, Submandibular GI, Inflammation					1 [3.0]	1 [1.0]
Left, Submandibular GI, Mitosis						
Left, Submandibular GI, Regeneration		1 [1.0]		1 [1.0]	1 [2.0]	1 [1.0]
Parotid GI, Right, Degeneration					2 [1.5]	
Parotid GI, Right, Mitosis					3 [2.0]	
Parotid GI, Right, Regeneration					1 [2.0]	
Right, Sublingual GI, Inflammation						1 [2.0]
Right, Sublingual GI, Regeneration						1 [3.0]
Right, Submandibular GI, Degeneration					4 [3.5]	
Right, Submandibular GI, Inflammation	2 [1.0]				4 [2.3]	4 [2.5]
Right, Submandibular GI, Mitosis						
Right, Submandibular GI, Regeneration	5 [2.8]	4 [2.3]	5 [1.2]	3 [1.0]	4 [2.0]	4 [2.8]
Stomach, Forestomach	(5)	(5)	(5)	(5)	(5)	(5)
Stomach, Glandular	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization	2 [1.5]					1 [1.0]
Tongue	(5)	(5)	(5)	(5)	(5)	(5)
Fibrosis, Focal						1 [3.0]
Infiltration Cellular, Histiocyte, Focal Necrosis						
CARDIOVASCULAR SYSTEM						
Blood Vessel	(5)	(5)	(5)	(5)	(5)	(5)
Heart	(5)	(5)	(5)	(5)	(5)	(5)
Cardiomyopathy	1 [1.0]	1 [1.0]	3 [1.0]	4 [1.0]	2 [1.0]	
ENDOCRINE SYSTEM						
Adrenal Cortex	(5)	(5)	(5)	(5)	(5)	(5)
Adrenal Medulla	(5)	(4)	(5)	(5)	(5)	(5)

a - Number of animals examined microscopically at site and number of animals with lesion

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Test Compound: Adenoviral Vector (AdhAQP1)

CAS Number: HAQP1

Date Report Requested: 10/19/2014

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First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	2-8ADHAQP1COHTB	2-8ADHAQP1COHTC	2-8ADHAQP1COHTD	2-8ADHAQP1COHTE	8-9ADHAQP1COHTA	8-9ADHAQP1COHTB
Islets, Pancreatic	(5)	(5)	(5)	(5)	(5)	(5)
Parathyroid Gland	(5)	(5)	(5)	(5)	(5)	(5)
Pituitary Gland	(5)	(4)	(5)	(5)	(5)	(5)
Pars Intermed, Hyperplasia, Focal						
Rathkes Cleft, Cyst, Focal						
Thyroid Gland	(5)	(5)	(5)	(5)	(5)	(5)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation						
Preputial Gland	(5)	(5)	(5)	(4)	(5)	(5)
Prostate	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation						
Inflammation, Acute, Focal						
Inflammation, Chronic						
Inflammation, Suppurative, Acute, Focal						
Seminal Vesicle	(5)	(5)	(5)	(5)	(5)	(5)
Testes	(5)	(5)	(5)	(5)	(5)	(5)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(5)	(5)	(5)	(5)	(5)	(5)
Lymph Node, Mandibular	(0)	(0)	(0)	(0)	(1)	(0)
Lymph Node, Mesenteric	(5)	(5)	(5)	(5)	(4)	(5)
Spleen	(5)	(5)	(5)	(5)	(5)	(5)
Thymus	(5)	(5)	(5)	(5)	(5)	(5)
INTEGUMENTARY SYSTEM						
Mammary Gland	(5)	(2)	(3)	(4)	(5)	(3)

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F 344/N Rat MALE	2-8ADHAQP1COHTB	2-8ADHAQP1COHTC	2-8ADHAQP1COHTD	2-8ADHAQP1COHTE	8-9ADHAQP1COHTA	8-9ADHAQP1COHTB
Skin	(5)	(5)	(5)	(5)	(5)	(5)
MUSCULOSKELETAL SYSTEM						
Bone	(5)	(5)	(5)	(5)	(5)	(5)
NERVOUS SYSTEM						
Brain	(5)	(5)	(5)	(5)	(5)	(5)
RESPIRATORY SYSTEM						
Lung	(5)	(5)	(5)	(5)	(5)	(5)
Nose	(5)	(5)	(5)	(5)	(5)	(5)
Trachea	(5)	(5)	(5)	(5)	(5)	(5)
SPECIAL SENSES SYSTEM						
Eye	(5)	(5)	(5)	(5)	(5)	(5)
Retina, Atrophy						
Retina, Dysplasia						
Harderian Gland	(5)	(5)	(5)	(5)	(5)	(5)
Degeneration						
Inflammation				1 [1.0]		
Regeneration						
URINARY SYSTEM						
Kidney	(5)	(5)	(5)	(5)	(5)	(5)
Nephropathy			1 [1.0]			
Renal Tubule, Casts Protein					1 [1.0]	
Urinary Bladder	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization						
Mucosa, Hyperplasia						

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 Lab: MBA

F 344/N Rat MALE	8-9ADHAQP1COHTC	8-9ADHAQP1COHTD	8-9AJDAQP1COHTE	2-11ADHAQP1COHTA	2-11ADHAQP1COHTB	2-11ADHAQP1COHTC
Disposition Summary						
Animals Initially In Study	5	5	5	5	5	5
Scheduled Sacrifice	5	5		5	5	5
Early Deaths						
Accidentally Killed						
Survivors						
Terminal Sacrifice			5			
Animals Examined Microscopically	5	5	5	5	5	5
ALIMENTARY SYSTEM						
Esophagus	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Cecum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Large, Colon	(5)	(5)	(5)	(5)	(5)	(5)
Hemorrhage		2 [3.5]				
Hemorrhage, Acute, Diffuse					1 [4.0]	
Hemorrhage, Diffuse						
Intestine Large, Rectum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Duodenum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Ileum	(5)	(5)	(5)	(5)	(5)	(5)
Intestine Small, Jejunum	(5)	(5)	(5)	(5)	(5)	(5)
Liver	(5)	(5)	(5)	(5)	(5)	(5)
Basophilic Focus						
Inflammation	1 [1.0]		1 [1.0]			
Oral Mucosa	(5)	(5)	(5)	(5)	(5)	(5)
Pancreas	(5)	(5)	(5)	(5)	(5)	(5)
Acinus, Atrophy						
Salivary Glands	(5)	(5)	(3)	(5)	(5)	(5)
Left, Parotid Gl, Degeneration						
Left, Parotid Gl, Mitosis				1 [1.0]		

a - Number of animals examined microscopically at site and number of animals with lesion
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F 344/N Rat MALE	8-9ADHAQP1COHTC	8-9ADHAQP1COHTD	8-9AJDAQP1COHTE	2-11ADHAQP1COHTA	2-11ADHAQP1COHTB	2-11ADHAQP1COHTC
Left, Sublingual GI, Regeneration						
Left, Submandibular GI, Degeneration				1 [3.0]		
Left, Submandibular GI, Inflammation				1 [2.0]	2 [1.0]	
Left, Submandibular GI, Mitosis						
Left, Submandibular GI, Regeneration	2 [1.0]		1 [1.0]	1 [1.0]		
Parotid GI, Right, Degeneration				1 [2.0]		
Parotid GI, Right, Mitosis				2 [1.0]		
Parotid GI, Right, Regeneration				1 [2.0]		
Right, Sublingual GI, Inflammation						
Right, Sublingual GI, Regeneration						
Right, Submandibular GI, Degeneration				4 [3.5]		
Right, Submandibular GI, Inflammation		1 [1.0]		3 [2.3]	5 [2.6]	5 [1.2]
Right, Submandibular GI, Mitosis						
Right, Submandibular GI, Regeneration	5 [2.0]	5 [1.0]	2 [1.0]	4 [2.3]	5 [2.6]	5 [1.8]
Stomach, Forestomach	(5)	(5)	(5)	(5)	(5)	(5)
Stomach, Glandular	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization	1 [1.0]					
Tongue	(5)	(5)	(5)	(5)	(5)	(5)
Fibrosis, Focal						
Infiltration Cellular, Histiocyte, Focal						
Necrosis						
CARDIOVASCULAR SYSTEM						
Blood Vessel	(5)	(5)	(5)	(5)	(5)	(5)
Heart	(5)	(5)	(5)	(5)	(5)	(5)
Cardiomyopathy	2 [1.0]	3 [1.0]	4 [1.0]	1 [1.0]		3 [1.0]
ENDOCRINE SYSTEM						
Adrenal Cortex	(5)	(5)	(5)	(5)	(5)	(5)
Adrenal Medulla	(5)	(5)	(5)	(5)	(5)	(5)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20537-01

Test Type: 90-DAY

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Test Compound: Adenoviral Vector (AdhAQP1)

CAS Number: HAQP1

Date Report Requested: 10/19/2014

Time Report Requested: 17:36:55

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	8-9ADHAQP1COHTC	8-9ADHAQP1COHTD	8-9AJDAQP1COHTE	2- 11ADHAQP1COHTA	2- 11ADHAQP1COHTB	2- 11ADHAQP1COHTC
Islets, Pancreatic	(5)	(5)	(5)	(5)	(5)	(5)
Parathyroid Gland	(4)	(5)	(5)	(5)	(5)	(5)
Pituitary Gland	(5)	(5)	(5)	(5)	(5)	(4)
Pars Intermed, Hyperplasia, Focal						
Rathkes Cleft, Cyst, Focal						
Thyroid Gland	(5)	(5)	(5)	(5)	(5)	(5)
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation						
Preputial Gland	(5)	(5)	(5)	(5)	(4)	(5)
Prostate	(5)	(5)	(5)	(5)	(5)	(5)
Inflammation						
Inflammation, Acute, Focal						
Inflammation, Chronic						
Inflammation, Suppurative, Acute, Focal						
Seminal Vesicle	(5)	(5)	(5)	(5)	(5)	(5)
Testes	(5)	(5)	(5)	(5)	(5)	(5)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(5)	(5)	(5)	(5)	(5)	(5)
Lymph Node, Mandibular	(0)	(0)	(0)	(0)	(0)	(0)
Lymph Node, Mesenteric	(5)	(5)	(4)	(5)	(5)	(5)
Spleen	(5)	(5)	(5)	(5)	(5)	(5)
Thymus	(5)	(5)	(5)	(5)	(5)	(5)
INTEGUMENTARY SYSTEM						
Mammary Gland	(2)	(3)	(4)	(3)	(4)	(3)

a - Number of animals examined microscopically at site and number of animals with lesion

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Experiment Number: 20537-01
Test Type: 90-DAY
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Adenoviral Vector (AdhAQP1)
CAS Number: HAQP1

Date Report Requested: 10/19/2014
Time Report Requested: 17:36:55
First Dose M/F: NA / NA
Lab: MBA

F 344/N Rat MALE	8-9ADHAQP1COHTC	8-9ADHAQP1COHTD	8-9AJDAQP1COHTE	2-11ADHAQP1COHTA	2-11ADHAQP1COHTB	2-11ADHAQP1COHTC
Skin	(5)	(5)	(5)	(5)	(5)	(5)
MUSCULOSKELETAL SYSTEM						
Bone	(5)	(5)	(5)	(5)	(5)	(5)
NERVOUS SYSTEM						
Brain	(5)	(5)	(5)	(5)	(5)	(5)
RESPIRATORY SYSTEM						
Lung	(5)	(5)	(5)	(5)	(5)	(5)
Nose	(5)	(5)	(5)	(5)	(5)	(5)
Trachea	(5)	(5)	(5)	(5)	(5)	(5)
SPECIAL SENSES SYSTEM						
Eye	(5)	(5)	(5)	(5)	(5)	(5)
Retina, Atrophy						
Retina, Dysplasia						
Harderian Gland	(5)	(5)	(5)	(5)	(5)	(5)
Degeneration						
Inflammation						
Regeneration						
URINARY SYSTEM						
Kidney	(5)	(5)	(5)	(5)	(5)	(5)
Nephropathy						
Renal Tubule, Casts Protein						
Urinary Bladder	(5)	(5)	(5)	(5)	(5)	(5)
Mineralization						
Mucosa, Hyperplasia			1 [2.0]			

a - Number of animals examined microscopically at site and number of animals with lesion
 b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20537-01

Test Type: 90-DAY

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Test Compound: Adenoviral Vector (AdhAQP1)

CAS Number: HAQP1

Date Report Requested: 10/19/2014

Time Report Requested: 17:36:55

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	2- 11ADHAQP1COHTD	2- 11ADHAQP1COHTE
Disposition Summary		
Animals Initially In Study	5	5
Scheduled Sacrifice	5	
Early Deaths		
Accidentally Killed		
Survivors		
Terminal Sacrifice		5
Animals Examined Microscopically	5	5

ALIMENTARY SYSTEM

Esophagus	(5)	(5)
Intestine Large, Cecum	(5)	(5)
Intestine Large, Colon	(5)	(5)
Hemorrhage		
Hemorrhage, Acute, Diffuse		
Hemorrhage, Diffuse		
Intestine Large, Rectum	(5)	(5)
Intestine Small, Duodenum	(5)	(5)
Intestine Small, Ileum	(5)	(5)
Intestine Small, Jejunum	(5)	(5)
Liver	(5)	(5)
Basophilic Focus		
Inflammation	2 [1.0]	1 [1.0]
Oral Mucosa	(5)	(5)
Pancreas	(5)	(5)
Acinus, Atrophy	1 [2.0]	
Salivary Glands	(4)	(4)
Left, Parotid Gl, Degeneration		
Left, Parotid Gl, Mitosis		

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20537-01

Test Type: 90-DAY

Route: INTRADUCTAL CANNULATION

Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Test Compound: Adenoviral Vector (AdhAQP1)

CAS Number: HAQP1

Date Report Requested: 10/19/2014

Time Report Requested: 17:36:55

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	2- 11ADHAQP1COHTD	2- 11ADHAQP1COHTE
Left, Sublingual GI, Regeneration		
Left, Submandibular GI, Degeneration		
Left, Submandibular GI, Inflammation		
Left, Submandibular GI, Mitosis		
Left, Submandibular GI, Regeneration		1 [1.0]
Parotid GI, Right, Degeneration		
Parotid GI, Right, Mitosis		
Parotid GI, Right, Regeneration		
Right, Sublingual GI, Inflammation		
Right, Sublingual GI, Regeneration		
Right, Submandibular GI, Degeneration		
Right, Submandibular GI, Inflammation		1 [1.0]
Right, Submandibular GI, Mitosis		
Right, Submandibular GI, Regeneration	4 [1.3]	3 [1.0]
Stomach, Forestomach	(5)	(5)
Stomach, Glandular	(5)	(5)
Mineralization		
Tongue	(5)	(5)
Fibrosis, Focal		
Infiltration Cellular, Histiocyte, Focal		
Necrosis		
CARDIOVASCULAR SYSTEM		
Blood Vessel	(5)	(5)
Heart	(5)	(5)
Cardiomyopathy	3 [1.0]	3 [1.0]
ENDOCRINE SYSTEM		
Adrenal Cortex	(5)	(5)
Adrenal Medulla	(5)	(5)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20537-01
Test Type: 90-DAY
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Adenoviral Vector (AdhAQP1)
CAS Number: HAQP1

Date Report Requested: 10/19/2014
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First Dose M/F: NA / NA
Lab: MBA

F 344/N Rat MALE	2- 11ADHAQP1COHTD	2- 11ADHAQP1COHTE
Islets, Pancreatic	(5)	(5)
Parathyroid Gland	(5)	(5)
Pituitary Gland	(5)	(4)
Pars Intermed, Hyperplasia, Focal		
Rathkes Cleft, Cyst, Focal		
Thyroid Gland	(5)	(5)
GENERAL BODY SYSTEM		
None		
GENITAL SYSTEM		
Epididymis	(5)	(5)
Inflammation		
Preputial Gland	(4)	(5)
Prostate	(5)	(5)
Inflammation		
Inflammation, Acute, Focal		1 [2.0]
Inflammation, Chronic		
Inflammation, Suppurative, Acute, Focal		
Seminal Vesicle	(5)	(5)
Testes	(5)	(5)
HEMATOPOIETIC SYSTEM		
Bone Marrow	(5)	(5)
Lymph Node, Mandibular	(0)	(0)
Lymph Node, Mesenteric	(5)	(5)
Spleen	(5)	(5)
Thymus	(5)	(5)
INTEGUMENTARY SYSTEM		
Mammary Gland	(3)	(5)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Experiment Number: 20537-01
Test Type: 90-DAY
Route: INTRADUCTAL CANNULATION
Species/Strain: Rat/F 344/N

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**
Test Compound: Adenoviral Vector (AdhAQP1)
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Date Report Requested: 10/19/2014
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Lab: MBA

F 344/N Rat MALE	2- 11ADHAQP1COHTD	2- 11ADHAQP1COHTE
Skin	(5)	(5)
MUSCULOSKELETAL SYSTEM		
Bone	(5)	(5)
NERVOUS SYSTEM		
Brain	(5)	(5)
RESPIRATORY SYSTEM		
Lung	(5)	(5)
Nose	(5)	(5)
Trachea	(5)	(5)
SPECIAL SENSES SYSTEM		
Eye	(5)	(5)
Retina, Atrophy		
Retina, Dysplasia		
Harderian Gland	(5)	(5)
Degeneration		
Inflammation		
Regeneration		
URINARY SYSTEM		
Kidney	(5)	(5)
Nephropathy		
Renal Tubule, Casts Protein		
Urinary Bladder	(5)	(5)
Mineralization		
Mucosa, Hyperplasia		

**** END OF REPORT ****

a - Number of animals examined microscopically at site and number of animals with lesion
b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)