

**Study Number:** C11297-01

**Test Type:** TOX

**Route:** Oral Gavage

**Species/Strain:** Rat/Sprague Dawley

**C Number:**

**Study Gender:**

**PWG Approval Date**

**PA41: Clinical Chemistry Summary**

**Test Compound:** 1,3,5,7,9,11-Hexabromocyclododecane

**CAS Number:** 25637-99-4

C11297-01

Male

See web page for date of PWG Approval

**Date Report Requested:** 04/26/2019

**Time Report Requested:** 07:40:40

**Lab:** Battelle

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Male: Core Males

	Phase Day	Treatment Groups (mg/kg)				
		0	0.06	0.641	6.41	64.1
Urea Nitrogen (mg/dL)	SD 5	15.6 ± 1.2 (5)	13.5 ± 0.7 (6)	15.0 ± 0.9 (6)	14.3 ± 0.6 (6)	13.8 ± 1.5 (5)
Percent of Control			86.5	96.2	91.9	88.5
Creatinine (mg/dL)	SD 5	0.38 ± 0.02 (5)	0.37 ± 0.02 (6)	0.40 ± 0.00 (6)	0.37 ± 0.02 (6)	0.35 ± 0.02 (6)
Percent of Control			96.49	105.26	96.49	92.11
Glucose (mg/dL)	SD 5	238.8 ± 12.5 (5)	240.4 ± 3.0 (5)	227.3 ± 8.7 (6)	219.8 ± 15.8 (6)	232.3 ± 8.1 (6)
Percent of Control			100.7	95.2	92.1	97.3
Sodium (mmol/L)	SD 5	147.4 ± 0.7 (5)	147.2 ± 0.5 (6)	147.8 ± 0.6 (6)	146.8 ± 0.5 (6)	147.8 ± 0.7 (6)
Percent of Control			99.8	100.3	99.6	100.3
Potassium (mmol/L)	SD 5	6.8 ± 0.3 (5)	7.2 ± 0.3 (6)	7.2 ± 0.3 (6)	7.1 ± 0.2 (6)	6.8 ± 0.2 (6)
Percent of Control			104.8	105.5	103.6	99.2
Chloride (mmol/L)	SD 5	100.4 ± 0.9 (5) **	101.5 ± 0.6 (6)	101.3 ± 0.2 (6)	101.5 ± 1.0 (6)	101.8 ± 0.5 (6)
Percent of Control			101.1	100.9	101.1	101.4
Total Protein (g/dL)	SD 5	5.92 ± 0.14 (5)	5.98 ± 0.07 (6)	6.22 ± 0.10 (6)	5.95 ± 0.02 (6)	6.05 ± 0.13 (6)
Percent of Control			101.07	105.01	100.51	102.20
Globulin (g/dL)	SD 5	1.62 ± 0.04 (5) *	1.57 ± 0.03 (6)	1.72 ± 0.08 (6)	1.60 ± 0.03 (6)	1.68 ± 0.06 (6)
Percent of Control			96.71	105.97	98.77	103.91
A/G Ratio	SD 5	2.65 ± 0.03 (5) *	2.82 ± 0.05 (6)	2.65 ± 0.13 (6)	2.72 ± 0.06 (6)	2.61 ± 0.08 (6)
Percent of Control			106.38	99.81	102.60	98.16
Albumin (g/dL)	SD 5	4.30 ± 0.10 (5)	4.42 ± 0.05 (6)	4.50 ± 0.04 (6)	4.35 ± 0.03 (6)	4.37 ± 0.08 (6)
Percent of Control			102.71	104.65	101.16	101.55
Cholesterol (mg/dL)	SD 5	113.0 ± 23.1 (5)	132.8 ± 8.9 (5)	141.3 ± 6.6 (6)	139.2 ± 6.6 (6)	132.0 ± 7.5 (6)
Percent of Control			117.5	125.1	123.2	116.8

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	Phase Day	Treatment Groups (mg/kg)				
		0	0.06	0.641	6.41	64.1
Triglyceride (mg/dL)	SD 5	83.4 ± 8.7 (5)	66.0 ± 11.4 (5)	85.2 ± 2.4 (6)	72.2 ± 3.3 (6)	81.3 ± 10.9 (6)
Percent of Control			79.1	102.1	86.5	97.5
Alanine Aminotransferase (IU/L)	SD 5	54.6 ± 3.1 (5)	55.7 ± 2.3 (6)	64.7 ± 3.8 (6)	57.8 ± 2.8 (6)	51.7 ± 2.9 (6)
Percent of Control			102.0	118.4	105.9	94.6
Creatine Kinase (IU/L)	SD 5	139.0 ± 5.8 (5) *	136.7 ± 7.1 (6)	177.8 ± 14.5 (6)	174.7 ± 7.0 (6)	153.5 ± 7.5 (6)
Percent of Control			98.3	127.9	125.7	110.4
Sorbitol Dehydrogenase (IU/L)	SD 5	7.2 ± 0.6 (5) **	8.1 ± 1.0 (6)	9.4 ± 0.5 (6)	8.7 ± 0.5 (6)	10.0 ± 1.2 (6)
Percent of Control			112.4	129.5	119.8	138.3
Bile salt/acids (umol/L)	SD 5	72.8 ± 10.6 (5)	40.2 ± 4.3 (6)	63.3 ± 8.0 (6)	54.3 ± 7.4 (6)	44.7 ± 14.0 (6)
Percent of Control			55.2	87.0	74.6	61.4

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	Phase Day	Treatment Groups 641
Urea Nitrogen (mg/dL)	SD 5	14.8 ± 0.8 (6)
Percent of Control		95.1
Creatinine (mg/dL)	SD 5	0.38 ± 0.02 (6)
Percent of Control		100.88
Glucose (mg/dL)	SD 5	226.8 ± 9.3 (6)
Percent of Control		95.0
Sodium (mmol/L)	SD 5	147.8 ± 0.5 (6)
Percent of Control		100.3
Potassium (mmol/L)	SD 5	7.3 ± 0.2 (6)
Percent of Control		106.7
Chloride (mmol/L)	SD 5	105.0 ± 0.6 (6) **
Percent of Control		104.6
Total Protein (g/dL)	SD 5	6.25 ± 0.15 (6)
Percent of Control		105.57
Globulin (g/dL)	SD 5	1.85 ± 0.08 (6)
Percent of Control		114.20
A/G Ratio	SD 5	2.40 ± 0.08 (6)
Percent of Control		90.23
Albumin (g/dL)	SD 5	4.40 ± 0.07 (6)
Percent of Control		102.33
Cholesterol (mg/dL)	SD 5	145.0 ± 6.5 (6)
Percent of Control		128.3

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	<b>Phase Day</b>	<b>Treatment Groups</b>
		<b>641</b>
Triglyceride (mg/dL)	SD 5	105.5 ± 5.4 (6)
Percent of Control		126.5
Alanine Aminotransferase (IU/L)	SD 5	56.0 ± 5.4 (6)
Percent of Control		102.6
Creatine Kinase (IU/L)	SD 5	167.7 ± 11.4 (6)
Percent of Control		120.6
Sorbitol Dehydrogenase (IU/L)	SD 5	13.4 ± 2.2 (6) **
Percent of Control		186.1
Bile salt/acids (umol/L)	SD 5	43.0 ± 8.5 (6)
Percent of Control		59.1

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## LEGEND

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Values given as mean  $\pm$  SEM (N) with Percent of Control calculated by (dosed group mean / control group mean) x 100

SD – Study Day

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests (unless otherwise noted).

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

One value each for Glucose and Triglycerides in the 0.06 mg/kg group were excluded. One value for Urea Nitrogen in the 64.1 mg/kg group was excluded.

**\*\* END OF REPORT \*\***