

**Distribution of Radioactivity 72 Hours Following a Single Oral Gavage Administration of
15.8 mg/kg [¹⁴C]2,3-Butanedione to Male F-344 Rats – Study C**

Dose Recovered in Excreta, Carcass, and Tissues (%)^a

End of Collection Period (h)	Urine ^b	Cage Rinse	Feces ^b	Volatile Breath ^c	CO ₂ Breath ^c	Carcass and Tissues	Total
6	8.88 ± 1.49	–	–	0.06 ± 0.03	59.1 ± 3.11	–	68.0 ± 2.69
12	14.0 ± 1.95	–	0.43 ± 0.11	0.14 ± 0.04	67.7 ± 1.44	–	82.3 ± 1.75
24	15.3 ± 2.19	–	0.87 ± 0.12	0.20 ± 0.02	70.0 ± 0.33	–	86.3 ± 1.55
36 ^d	15.3 ± 2.19	–	0.87 ± 0.12	0.22 ± 0.03	71.3 ± 1.26	–	87.6 ± 1.52
48	15.6 ± 2.30	–	1.17 ± 0.19	0.24 ± 0.03	71.8 ± 1.28	–	88.9 ± 1.43
72	15.7 ± 2.32	0.04 ± 0.03	1.36 ± 0.18	0.26 ± 0.05	72.7 ± 1.28	7.29 ± 0.50	97.7 ± 0.71

Distribution in Tissues (72 hours)^a

Tissue	µg-eq per g Tissue Mean	µg-eq per g Tissue Mean	TBR ^d Mean	TBR SD	Dose in Total Tissue (%) Mean	Dose in Total Tissue (%) SD
Adipose	1.294	0.610	1.785	0.753	0.550	0.241
Bladder	2.402	0.224	3.37	0.344	0.00652	0.00131
Blood	0.715	0.045	unity	–	0.224	0.0142
Brain	0.727	0.066	1.015	0.049	0.0285	0.00138
Heart	1.119	0.210	1.56	0.214	0.0229	0.00359
Kidney	3.014	0.260	4.21	0.220	0.146	0.0121
Liver	1.549	0.255	2.16	0.235	0.393	0.0539
Lung	2.097	0.354	2.92	0.328	0.0490	0.00596
Muscle	0.661	0.312	0.912	0.387	1.91	0.876
Skin	2.73	0.240	3.81	0.215	2.82	0.214
Spleen	2.17	0.275	3.02	0.222	0.0274	0.00130
Testis	1.16	0.129	1.64	0.279	0.0721	0.00449
Stomach ^e	0.0521	0.007	0.0726	0.006	0.0703	0.00924
Small intestine ^e	0.271	0.076	0.374	0.086	0.379	0.0951
Cecum ^e	0.089	0.026	0.123	0.0298	0.120	0.0365
Large intestine ^e	0.084	0.011	0.118	0.0212	0.107	0.0163

^a All values expressed as mean ± standard deviation (S D) (N=4). Dash indicates no sample obtained at that time point.

^b Urine and feces were collected at 6 (urine only), 12, 24, 48, and 72 hours (h).

^c Volatile and CO₂ breath traps were changed at 6, 12, 24, 36, 48, and 72 h.

^d TBR = tissue/blood ratio

^e Includes contents