

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

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	4.0 ± 1.2	–	–	0.09 ± 0.02	73.4 ± 2.8	–	77.5 ± 1.8
12	6.0 ± 1.2	–	0.29 ± 0.06	0.11 ± 0.02	77.9 ± 2.1	–	84.3 ± 1.0
18	6.0 ± 1.2	–	0.29 ± 0.06	0.13 ± 0.02	79.4 ± 2.0	–	85.8 ± 0.97
24	6.61 ± 1.28	–	0.69 ± 0.06	0.14 ± 0.02	80.1 ± 1.99	–	87.5 ± 0.84
30	6.61 ± 1.28	–	0.69 ± 0.06	0.15 ± 0.02	80.7 ± 1.95	–	88.1 ± 0.80
36	6.61 ± 1.28	–	0.69 ± 0.06	0.15 ± 0.03	81.2 ± 1.94	–	88.6 ± 0.78
48	6.79 ± 1.28	–	0.94 ± 0.09	0.16 ± 0.03	81.2 ± 1.94	–	89.1 ± 0.80
72	6.85 ± 1.29	0.02 ± 0.00	1.08 ± 0.10	0.17 ± 0.03	82.0 ± 1.89	6.69 ± 0.47	96.7 ± 0.87

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	0.047	0.010	0.598	0.135	0.214	0.0480
Bladder	0.163	0.0243	2.10	0.394	0.00495	0.00166
Blood	0.078	0.007	Unity	–	0.260	0.0249
Brain	0.065	0.005	0.829	0.041	0.0293	0.00172
Heart	0.098	0.003	1.26	0.096	0.0208	0.00077
Kidney	0.258	0.028	3.29	0.164	0.115	0.00759
Liver	0.141	0.009	1.81	0.0878	0.331	0.0441
Lung	0.162	0.008	2.08	0.234	0.0441	0.00667
Muscle	0.064	0.009	0.822	0.0795	1.97	0.255
Skin	0.211	0.038	2.70	0.428	2.32	0.375
Spleen	0.187	0.010	2.40	0.154	0.0265	0.00129
Testis	0.109	0.006	1.40	0.137	0.0651	0.0215
Stomach ^e	0.004	0.0002	0.0469	0.005	0.0544	0.00287
Small intestine ^e	0.016	0.002	0.203	0.0218	0.263	0.0396
Cecum ^e	0.006	0.0003	0.0753	0.00627	0.0903	0.00594
Large intestine ^e	0.007	0.002	0.0932	0.0248	0.105	0.0355

^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, 18, 24, 30, 36, 48, and 72 h.

^d TBR = tissue/blood ratio.

^e Includes contents