

**Disposition of Radioactivity 72 h Following IV Bolus Administration of 10 mg/kg
[¹⁴C]HMB to Male Harlan Sprague Dawley Rats (Group H)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	Volatile Organic CPDE	CO ₂ CPDE	GI Content	Total
4	13.3 ± 7.1	5.73 ± 2.01	—	0.0234 ± 0.0057	0.172 ± 0.049	—	19.2
8	24.0 ± 5.9	8.75 ± 1.76	—	0.0465 ± 0.0106	0.338 ± 0.074	—	33.1
12	34.2 ± 7.9	9.35 ± 1.41	—	0.0598 ± 0.0132	0.521 ± 0.086	—	44.2
24	43.3 ± 7.2	10.3 ± 1.3	18.8 ± 8.9	0.0766 ± 0.0268	0.678 ± 0.072	—	73.4
48	46.4 ± 8.5	10.8 ± 1.5	26.3 ± 7.2	0.0598 ± 0.0132	0.521 ± 0.086	—	84.0
72 ^c	47.3 ± 7.7	18.7 ± 16.2	27.8 ± 6.4	0.0766 ± 0.0268	0.678 ± 0.072	0.772 ± 1.294	95.4

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	0.233 ± 0.169	unity	0.0475 ± 0.0309
Adipose ^d	0.417 ± 0.418	1.61 ± 0.45	0.0796 ± 0.0740
Muscle ^d	0.103 ± 0.020	0.562 ± 0.264	0.119 ± 0.024
Skin ^d	0.283 ± 0.219	1.29 ± 0.50	0.149 ± 0.104
Brain	0.0446 ± 0.0107	0.237 ± 0.096	0.00086 ± 0.00016
Heart	0.0612 ± 0.0223	0.316 ± 0.113	0.00055 ± 0.00011
Kidneys	0.685 ± 0.542	3.16 ± 1.41	0.0125 ± 0.0082
Liver	0.542 ± 0.170	2.88 ± 1.25	0.0553 ± 0.0131
Lung	0.0872 ± 0.0295	0.463 ± 0.230	0.00126 ± 0.00041
Spleen	0.0836 ± 0.0444	0.400 ± 0.117	0.00057 ± 0.00027
Adrenals	0.544 ± 0.502	2.78 ± 2.30	0.00013 ± 0.00002
Thymus	0.0647 ± 0.0245	0.330 ± 0.140	0.00031 ± 0.00010
Thyroid	0.722 ± 0.132	4.21 ± 2.33	0.00005 ± 0.00003
Urinary Bladder	0.519 ± 0.349	3.01 ± 2.88	0.00042 ± 0.00035
Pancreas	0.136 ± 0.145	0.539 ± 0.210	0.00100 ± 0.00070
Testes	0.0559 ± 0.0124	0.330 ± 0.217	0.00209 ± 0.00066
Cecum	1.53 ± 2.33	5.04 ± 4.12	0.00848 ± 0.01147
Large Intestine	0.514 ± 0.367	2.78 ± 2.56	0.00732 ± 0.00603
Small Intestine	0.777 ± 0.996	2.88 ± 1.48	0.0343 ± 0.0396
Stomach	0.251 ± 0.262	1.03 ± 0.47	0.00374 ± 0.00341

Disposition Summary (Dose Recovered [%])

Sample	Mean ± SD
Urine + Cage Rinse	66.0 ± 11.4
Urine	47.3 ± 7.7
Cage Rinse	18.7 ± 16.2
Feces	27.8 ± 6.4
VOCs	0.0766 ± 0.0268
CO ₂	0.678 ± 0.072
GI Content	0.772 ± 1.294
Carcass	0.589 ± 0.349
Tail	1.27 ± 2.61
Tissues	0.520 ± 0.291
Total Recovered	97.3 ± 12.8

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 7.86 ± 0.64 mg/kg (39.2 ± 3.2 µCi).

^bCPDE = Cumulative percent dose excreted.

^c72 hour (h) urine collection includes urine present in the urinary bladder at study termination.

^dTissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).