

**Disposition of Radioactivity 72 Hours Following Dermal Application of 10 mg/kg [¹⁴C]HMB,
Formulated in Paraffin Oil, to Male Harlan Sprague Dawley Rats (Group A)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	1.51 ± 1.35	1.13 ± 0.67	—	—	2.64
8	4.63 ± 1.69	2.62 ± 1.11	—	—	7.25
12	8.62 ± 1.99	3.93 ± 1.30	—	—	12.5
24	20.4 ± 5.3	6.15 ± 2.14	9.18 ± 1.34	—	35.7
48	31.6 ± 4.8	7.65 ± 2.50	17.8 ± 2.8	—	57.0
72 ^c	36.1 ± 4.5	12.0 ± 3.3	21.1 ± 3.4	1.56 ± 0.66	71.0

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.412 ± 0.102	unity	0.060 ± 0.011
Adipose ^d	1.35 ± 0.69	3.17 ± 0.93	0.183 ± 0.077
Muscle ^d	0.236 ± 0.117	0.564 ± 0.199	0.183 ± 0.072
Skin ^d	13.9 ± 7.4	33.0 ± 11.3	5.10 ± 2.17
Brain	0.0957 ± 0.0363	0.245 ± 0.119	0.00114 ± 0.00048
Heart	0.153 ± 0.033	0.375 ± 0.035	0.00101 ± 0.00014
Kidneys	1.23 ± 0.28	3.01 ± 0.47	0.0175 ± 0.0026
Liver	1.16 ± 0.22	2.86 ± 0.34	0.0998 ± 0.0167
Lung	0.229 ± 0.060	0.560 ± 0.082	0.00227 ± 0.00032
Spleen	0.120 ± 0.035	0.296 ± 0.099	0.00059 ± 0.00013
Adrenals	0.487 ± 0.312	1.14 ± 0.54	0.00016 ± 0.00007
Thymus	0.0784 ± 0.0275	0.188 ± 0.040	0.00029 ± 0.00008
Thyroid	0.942 ± 0.653	2.39 ± 1.87	0.00003 ± 0.00001
Urinary Bladder	17.4 ± 26.1	47.8 ± 75.1	0.00585 ± 0.00693
Pancreas	0.403 ± 0.181	0.971 ± 0.324	0.00238 ± 0.00073
Testes	0.0781 ± 0.0114	0.197 ± 0.049	0.00198 ± 0.00020
Cecum	6.63 ± 3.31	16.5 ± 8.6	0.0255 ± 0.0098
Large Intestine	2.30 ± 0.84	5.76 ± 2.42	0.0221 ± 0.0122
Small Intestine	6.91 ± 4.50	17.4 ± 12.1	0.187 ± 0.076
Stomach	2.13 ± 0.81	5.48 ± 2.84	0.0213 ± 0.0108

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	1.52 ± 0.42
Applicator	0.653 ± 0.098
Tape/Glue	0.313 ± 0.243
Dose Site Swipes	0.553 ± 0.186
Total in Dose Site Skin	0.108 ± 0.079
Total Absorbed Dose	79.8 ± 6.9
Urine + Cage Rinse	48.2 ± 3.3
Urine	36.1 ± 4.5
Cage Rinse	12.0 ± 3.3
Feces	21.1 ± 3.4
GI Content	1.56 ± 0.66
Carcass	1.26 ± 2.14
Tissues	6.02 ± 2.22
Total Recovered	79.8 ± 7.0

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 12.0 ± 1.3 mg/kg (48.8 ± 5.3 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).