

**Disposition of Radioactivity 72 Hours Following Dermal Application of 10 mg/kg [¹⁴C]HMB,
Formulated in Lotion (Olive Oil:Emulsifying Wax:Water, 15:15:70 v:w:v),
to Male Harlan Sprague Dawley Rats (Group A-2)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	0.0573 ± 0.0373	0.0617 ± 0.0366	—	—	0.119
8	0.357 ± 0.244	0.203 ± 0.110	—	—	0.560
12	0.798 ± 0.397	0.455 ± 0.150	—	—	1.25
24	2.39 ± 1.11	0.866 ± 0.168	1.93 ± 0.68	—	5.18
48	6.73 ± 2.19	1.60 ± 0.30	5.96 ± 1.81	—	14.3
72c	11.9 ± 5.0	5.96 ± 2.44	21.7 ± 26.9	2.45 ± 0.61	42.9

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.580 ± 0.149	unity	0.0981 ± 0.0258
Adipose ^d	2.46 ± 0.45	4.54 ± 1.71	0.394 ± 0.076
Muscle ^d	0.292 ± 0.125	0.504 ± 0.139	0.270 ± 0.119
Skin ^d	3.50 ± 1.39	6.08 ± 1.95	1.51 ± 0.59
Brain	0.121 ± 0.049	0.213 ± 0.068	0.00192 ± 0.00075
Heart	0.235 ± 0.031	0.417 ± 0.064	0.00160 ± 0.00082
Kidneys	1.84 ± 0.55	3.20 ± 0.66	0.0298 ± 0.0112
Liver	1.56 ± 0.36	2.77 ± 0.59	0.132 ± 0.029
Lung	0.361 ± 0.120	0.632 ± 0.156	0.00423 ± 0.00146
Spleen	0.206 ± 0.068	0.376 ± 0.157	0.00132 ± 0.00040
Adrenals	0.906 ± 0.255	1.62 ± 0.50	0.00023 ± 0.00009
Thymus	0.123 ± 0.015	0.220 ± 0.040	0.00055 ± 0.00011
Thyroid	0.521 ± 0.326	0.960 ± 0.673	0.00026 ± 0.00007
Urinary Bladder	14.5 ± 22.6	34.0 ± 60.7	0.00418 ± 0.00503
Pancreas	0.703 ± 0.285	1.34 ± 0.82	0.00571 ± 0.00291
Testes	0.201 ± 0.070	0.388 ± 0.256	0.00546 ± 0.00103
Cecum	7.81 ± 2.74	13.8 ± 4.1	0.0383 ± 0.0161
Large Intestine	3.20 ± 1.20	6.02 ± 3.42	0.0356 ± 0.0121
Small Intestine	7.45 ± 2.28	14.3 ± 8.7	0.233 ± 0.050
Stomach	1.69 ± 0.97	2.91 ± 1.40	0.0188 ± 0.0112

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	51.7 ± 23.0
Applicator	8.70 ± 2.18
Tape/Glue	8.89 ± 3.78
Dose Site Swipes	34.1 ± 20.8
Total Dose Site Skin	1.58 ± 0.72
Total Absorbed Dose	45.8 ± 35.5
Urine + Cage Rinse	18.3 ± 7.6
Urine	11.9 ± 5.0
Cage Rinse	5.96 ± 2.44
Feces	21.7 ± 26.9
GI Content	2.45 ± 0.61
Carcass	0.0642 ± 0.1313
Tissues	2.79 ± 0.72
Total Recovered	99.1 ± 13.3

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 10.3 ± 0.2 mg/kg (42.1 ± 0.9 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).