

**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:v:v),
to Male B6C3F₁/N Mice (Group F)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	0.00084 ± 0.00033	0.581 ± 0.614	–	–	0.582
8	0.0967 ± 0.1297	0.780 ± 0.657	–	–	0.877
12	0.110 ± 0.142	1.67 ± 1.54	–	–	1.78
24	3.28 ± 2.36	3.24 ± 1.49	9.17 ± 3.02	–	15.7
48	4.70 ± 3.74	4.50 ± 1.38	16.2 ± 5.3	–	25.4
72 ^c	6.40 ± 4.77	7.00 ± 1.75	20.9 ± 6.8	0.580 ± 0.149	36.0

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	0.149 ± 0.022	unity	0.0181 ± 0.0027
Adipose ^d	0.807 ± 0.085	5.51 ± 0.99	0.140 ± 0.017
Muscle ^d	0.208 ± 0.025	1.43 ± 0.34	0.198 ± 0.027
Skin ^d	0.510 ± 0.123	3.47 ± 0.93	0.208 ± 0.052
Brain	0.0597 ± 0.0053	0.410 ± 0.088	0.00233 ± 0.00020
Heart	0.111 ± 0.018	0.764 ± 0.184	0.00104 ± 0.00015
Kidneys	0.476 ± 0.064	3.29 ± 0.87	0.0154 ± 0.0023
Liver	0.504 ± 0.031	3.47 ± 0.78	0.0630 ± 0.0039
Lung	0.198 ± 0.026	1.37 ± 0.38	0.00256 ± 0.00036
Spleen	0.101 ± 0.020	0.699 ± 0.193	0.00044 ± 0.00010
Adrenals	1.62 ± 0.56	11.1 ± 4.0	0.00041 ± 0.00010
Thymus	0.203 ± 0.083	1.34 ± 0.46	0.00041 ± 0.00016
Thyroid	0.701 ± 0.270	4.65 ± 1.38	0.00035 ± 0.00013
Urinary Bladder	2.95 ± 2.54	19.1 ± 14.9	0.00389 ± 0.00330
Pancreas	0.236 ± 0.127	1.62 ± 0.83	0.00380 ± 0.00220
Testes	0.0894 ± 0.0306	0.605 ± 0.193	0.00134 ± 0.00046
Cecum	1.99 ± 0.89	13.8 ± 6.5	0.0148 ± 0.0058
Large Intestine	0.744 ± 0.256	5.02 ± 1.53	0.00979 ± 0.00367
Small Intestine	1.42 ± 0.52	9.66 ± 3.44	0.0713 ± 0.0197
Stomach	0.519 ± 0.241	3.44 ± 1.36	0.00564 ± 0.00223

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	36.6 ± 4.5
Applicator	4.71 ± 1.00
Tape/Glue	2.13 ± 0.82
Dose Site Swipes	29.8 ± 4.5
Total Dose Site Skin	1.86 ± 0.95
Total Absorbed Dose	36.8 ± 8.2
Urine + Cage Rinse	14.0 ± 4.9
Urine	6.40 ± 4.77
Cage Rinse	7.00 ± 1.75
Feces	20.9 ± 6.8
GI Content	0.580 ± 0.149
Carcass	0.00163 ± 0.00365
Tissues	0.761 ± 0.103
Total Recovered	75.3 ± 10.9

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The actual dose delivered was 9.78 ± 0.18 mg/kg (103 ± 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 4.9%, muscle 38.4%, and skin 16.5% (International Life Sciences Institute, 1994).