

**Disposition of Radioactivity 72 Hours Following Dermal Application of 10 mg/kg [¹⁴C]HMB,
Formulated in Ethanol, to Female B6C3F₁/N Mice (Study L-2)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total CPDE
4	0.188 ± 0.396	1.26 ± 1.45	-	-	
8	3.47 ± 6.19	4.61 ± 1.60	-	-	
12	4.16 ± 7.59	9.59 ± 1.61	-	-	
24	4.47 ± 7.46	12.0 ± 1.4	31.8 ± 9.0	-	
48	5.01 ± 7.61	13.0 ± 1.6	37.2 ± 9.4	-	
72 ^c	5.29 ± 7.78	15.2 ± 2.4	39.4 ± 10.2	0.343 ± 0.068	67.9

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	0.332 ± 0.118	unity	0.0413 ± 0.0152
Adipose ^d	0.284 ± 0.134	0.877 ± 0.323	0.0490 ± 0.0183
Muscle ^d	0.118 ± 0.041	0.379 ± 0.140	0.113 ± 0.029
Skin ^d	0.446 ± 0.221	1.40 ± 0.60	0.182 ± 0.071
Brain	0.0865 ± 0.0133	0.296 ± 0.140	0.00461 ± 0.00072
Heart	0.239 ± 0.057	0.793 ± 0.320	0.00280 ± 0.00079
Kidneys	0.188 ± 0.041	0.630 ± 0.279	0.00600 ± 0.00104
Liver	0.315 ± 0.067	1.03 ± 0.37	0.0373 ± 0.0048
Lung	0.243 ± 0.107	0.812 ± 0.451	0.00382 ± 0.00136
Spleen	0.115 ± 0.087	0.369 ± 0.259	0.000718 ± 0.000333
Adrenals	1.46 ± 0.62	4.67 ± 2.18	0.000982 ± 0.000363
Thymus	0.207 ± 0.098	0.658 ± 0.284	0.000865 ± 0.000324
Thyroid	0.822 ± 0.420	2.67 ± 1.41	0.000508 ± 0.000085
Urinary Bladder	0.968 ± 0.252	3.15 ± 1.06	0.00149 ± 0.00033
Pancreas	0.138 ± 0.064	0.431 ± 0.174	0.00307 ± 0.00105
Testes	0.329 ± 0.141	1.17 ± 0.79	0.00293 ± 0.00101
Cecum	0.672 ± 0.376	1.95 ± 0.65	0.00699 ± 0.00286
Large Intestine	0.299 ± 0.146	0.939 ± 0.433	0.00542 ± 0.00150
Small Intestine	0.363 ± 0.154	1.11 ± 0.36	0.0293 ± 0.0131
Stomach	0.309 ± 0.074	0.989 ± 0.282	0.00492 ± 0.00129

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	15.3 ± 5.2
Applicator	2.86 ± 0.70
Tape / Glue	5.24 ± 3.62
Dose Site Swipes	7.18 ± 4.55
Total Dose Site Skin	1.27 ± 0.44
Total Absorbed Dose	68.6 ± 8.6
Urine + Cage Rinse	20.8 ± 6.5
Urine	5.29 ± 7.78
Cage Rinse	15.2 ± 2.4
Feces	39.4 ± 10.2
GI Content	0.343 ± 0.068
Carcass	0.166 ± 0.216
Tissues	0.662 ± 0.104
Total Recovered	85.2 ± 7.6

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 10 mg HMB/kg. The actual dose delivered was 9.55 ± 0.48 mg/kg (86.9 ± 4.3 µCi).

^bCumulative 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).