

**Disposition of Radioactivity 72 Hours Following Dermal Application of 1 mg/kg [¹⁴C]HMB,
Formulated in Ethanol, to Male B6C3F₁/N Mice (Group J)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total CPDE
4	0.000977 ± 0.000327	2.00 ± 1.87	-	-	2.90
8	0.0747 ± 0.0560	4.44 ± 3.28	-	-	6.49
12	1.29 ± 2.66	7.02 ± 3.62	-	-	11.1
24	2.10 ± 4.29	8.71 ± 4.05	14.1 ± 3.9	-	28.6
48	2.47 ± 4.82	9.76 ± 4.10	18.2 ± 4.6	-	34.7
72 ^c	3.01 ± 5.48	11.8 ± 4.1	20.5 ± 4.5	0.297 ± 0.145	40.8

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/ Blood Ratio	Recovery (%)
Blood ^d	0.0250 ± 0.0107	unity	0.0289 ± 0.0125
Adipose ^d	0.0371 ± 0.0124	1.73 ± 0.94	0.0609 ± 0.0187
Muscle ^d	0.0129 ± 0.0010	0.593 ± 0.224	0.117 ± 0.010
Skin ^d	0.0839 ± 0.0196	4.04 ± 2.06	0.328 ± 0.085
Brain	0.0100 ± 0.0011	0.458 ± 0.184	0.00394 ± 0.00056
Heart	0.0212 ± 0.0089	0.911 ± 0.460	0.00203 ± 0.00074
Kidneys	0.0228 ± 0.0037	1.04 ± 0.43	0.00748 ± 0.00119
Liver	0.0353 ± 0.0114	1.69 ± 1.01	0.0409 ± 0.0067
Lung	0.0250 ± 0.0018	1.1311 ± 0.3810	0.00342 ± 0.00025
Spleen	0.0170 ± 0.0068	0.832 ± 0.569	0.000677 ± 0.000245
Adrenals	0.506 ± 0.229	24.3 ± 17.0	0.000837 ± 0.000227
Thymus	0.0583 ± 0.0466	2.28 ± 1.08	0.000701 ± 0.000443
Thyroid	0.112 ± 0.017	5.18 ± 2.24	0.000375 ± 0.000061
Urinary Bladder	0.184 ± 0.115	7.40 ± 2.80	0.00174 ± 0.00102
Pancreas	0.0138 ± 0.0029	0.635 ± 0.300	0.00282 ± 0.00053
Testes	0.0211 ± 0.0030	0.944 ± 0.294	0.00310 ± 0.00022
Cecum	0.0714 ± 0.0169	3.38 ± 1.79	0.00595 ± 0.00109
Large Intestine	0.0257 ± 0.0050	1.19 ± 0.48	0.00423 ± 0.00047
Small Intestine	0.0479 ± 0.0227	2.33 ± 1.75	0.0301 ± 0.0132
Stomach	0.0434 ± 0.0289	2.22 ± 2.01	0.00558 ± 0.00358

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	26.9 ± 7.1
Applicator	6.43 ± 3.47
Tape / Glue	12.5 ± 3.6
Dose Site Swipes	7.91 ± 5.59
Total Dose Site Skin	1.39 ± 0.28
Total Absorbed Dose	41.4 ± 3.7
Urine + Cage Rinse	14.8 ± 5.4
Urine	3.01 ± 5.48
Cage Rinse	11.8 ± 4.1
Feces	20.5 ± 4.5
GI Content	0.297 ± 0.145
Carcass	0.0180 ± 0.0402
Tissues	0.666 ± 0.065
Total Recovered	69.7 ± 6.3

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 1 mg HMB/kg.

The actual dose delivered was 1.00 ± 0.07 mg/kg (89.75 ± 6.45 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).