

**Disposition of Radioactivity 72 Hours Following Dermal Application of 10 mg/kg
[¹⁴C]HMB, Formulated in Ethanol, to Male B6C3F₁/N Mouse (Group I-2)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total CPDE
4	0.00717 ± 0.01222	1.77 ± 2.00	-	-	-
8	2.35 ± 1.92	4.36 ± 2.67	-	-	-
12	2.59 ± 2.20	6.86 ± 2.14	-	-	-
24	4.04 ± 4.31	9.36 ± 3.09	25.6 ± 4.6	-	-
48	4.62 ± 4.73	11.1 ± 4.0	30.0 ± 4.8	-	-
72 ^c	4.77 ± 4.67	15.8 ± 3.4	32.4 ± 4.9	0.721 ± 0.191	62.8

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.189 ± 0.019	unity	0.0232 ± 0.0026
Adipose ^d	0.415 ± 0.177	2.17 ± 0.81	0.0722 ± 0.0301
Muscle ^d	0.154 ± 0.029	0.816 ± 0.137	0.148 ± 0.026
Skin ^d	0.930 ± 0.297	4.90 ± 1.38	0.382 ± 0.118
Brain	0.0724 ± 0.0099	0.384 ± 0.049	0.00294 ± 0.00050
Heart	0.148 ± 0.101	0.765 ± 0.475	0.00142 ± 0.00097
Kidneys	0.314 ± 0.074	1.67 ± 0.39	0.0109 ± 0.0026
Liver	0.356 ± 0.104	1.89 ± 0.53	0.0396 ± 0.0095
Lung	0.181 ± 0.048	0.953 ± 0.214	0.00235 ± 0.00063
Spleen	0.144 ± 0.111	0.743 ± 0.538	0.000539 ± 0.000315
Adrenals	3.68 ± 2.60	19.2 ± 12.2	0.000750 ± 0.000400
Thymus	0.505 ± 0.239	2.61 ± 1.05	0.000617 ± 0.000345
Thyroid	0.976 ± 0.467	5.11 ± 2.21	0.000458 ± 0.000228
Urinary Bladder	4.81 ± 7.42	25.8 ± 40.7	0.00462 ± 0.00650
Pancreas	0.233 ± 0.106	1.20 ± 0.46	0.00420 ± 0.00178
Testes	0.167 ± 0.138	0.863 ± 0.667	0.00247 ± 0.00207
Cecum	1.41 ± 1.20	7.28 ± 5.82	0.00972 ± 0.00802
Large Intestine	0.825 ± 0.677	4.24 ± 3.28	0.0122 ± 0.0089
Small Intestine	0.780 ± 0.421	4.06 ± 1.94	0.0421 ± 0.0170
Stomach	0.241 ± 0.082	1.26 ± 0.33	0.00289 ± 0.00094

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	18.9 ± 4.4
Applicator	6.46 ± 1.37
Tape/Glue	6.04 ± 3.65
Dose Site Swipes	6.42 ± 3.86
Total Dose Site Skin	0.694 ± 0.162
Total Absorbed Dose	63.6 ± 7.5
Urine + Cage Rinse	21.2 ± 7.7
Urine	4.77 ± 4.67
Cage Rinse	15.8 ± 3.4
Feces	32.4 ± 4.9
GI Content	0.721 ± 0.191
Carcass	0.0137 ± 0.0307
Tissues	0.777 ± 0.194
Total Recovered	83.2 ± 6.0

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 10 mg HMB/kg. The actual dose delivered was 9.53 ± 0.49 mg/kg (84.4 ± 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).