

**Disposition of Radioactivity 72 Hours Following Dermal Application of 0.1 mg/kg [¹⁴C]HMB,
Formulated in Light Paraffin Oil, to Male Harlan Sprague Dawley Rats (Group E)^a**

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	GI Content	Total
4	0.521 ± 0.371	0.364 ± 0.233	—	—	0.885
8	3.14 ± 0.63	1.38 ± 0.48	—	—	4.51
12	6.03 ± 1.33	3.32 ± 0.93	—	—	9.35
24	14.8 ± 3.2	4.42 ± 1.38	7.98 ± 0.92	—	27.2
48	24.6 ± 3.7	5.93 ± 1.85	17.2 ± 2.5	—	47.7
72 ^c	28.7 ± 4.9	8.08 ± 2.31	21.1 ± 2.1	2.35 ± 0.68	61.4

Disposition in Tissues

Tissue	nmol-eq HMB per g Tissue	Tissue/Blood Ratio	Recovery (%)
Blood ^d	0.0250 ± 0.0429	unity	0.354 ± 0.608
Adipose ^d	0.0319 ± 0.0176	3.53 ± 1.71	0.427 ± 0.233
Muscle ^d	0.0288 ± 0.0536	0.936 ± 0.255	2.22 ± 4.14
Skin ^d	0.144 ± 0.073	20.4 ± 17.7	5.28 ± 2.67
Brain	0.0197 ± 0.0424	0.295 ± 0.365	0.0276 ± 0.0594
Heart	0.0556 ± 0.1194	0.846 ± 1.017	0.0409 ± 0.0880
Kidneys	0.0236 ± 0.0097	3.48 ± 1.97	0.0317 ± 0.0123
Liver	0.140 ± 0.271	3.75 ± 1.40	0.881 ± 1.677
Lung	0.0270 ± 0.0532	0.700 ± 0.295	0.0305 ± 0.0610
Spleen	0.0368 ± 0.0736	0.850 ± 0.535	0.0177 ± 0.0348
Adrenals	0.0677 ± 0.1300	1.88 ± 0.63	0.00220 ± 0.00429
Thymus	0.0282 ± 0.0595	0.473 ± 0.491	0.0139 ± 0.0298
Thyroid	0.0688 ± 0.1437	1.29 ± 1.10	0.00268 ± 0.00554
Urinary Bladder	0.474 ± 0.479	49.5 ± 60.8	0.0122 ± 0.0114
Pancreas	0.0123 ± 0.0072	1.90 ± 1.41	0.0105 ± 0.0067
Testes	0.00147 ± 0.00075	0.233 ± 0.134	0.00374 ± 0.00186
Cecum	0.0908 ± 0.0344	13.0 ± 9.0	0.0368 ± 0.0123
Large Intestine	0.0296 ± 0.0130	3.88 ± 2.74	0.0302 ± 0.0131
Small Intestine	0.0873 ± 0.0321	13.8 ± 8.9	0.300 ± 0.128
Stomach	0.0167 ± 0.0090	2.50 ± 1.80	0.0173 ± 0.0092

Disposition Summary

Sample	% Dose Recovered
Total Unabsorbed Dose	6.66 ± 1.72
Applicator	4.12 ± 0.49
Tape/Glue	0.973 ± 0.503
Dose Site Swipes	1.57 ± 1.07
Total Dose Site Skin	0.368 ± 0.140
Total Absorbed Dose	72.5 ± 8.5
Urine + Cage Rinse	37.3 ± 3.7
Urine	28.7 ± 4.9
Cage Rinse	8.08 ± 2.31
Feces	21.1 ± 2.1
GI Content	2.35 ± 0.68
Carcass	1.36 ± 2.78
Tissues	9.74 ± 8.74
Total Recovered	79.5 ± 7.0

^aAll values expressed as mean ± standard deviation SD (N = 5). The actual dose delivered was 0.122 ± 0.004 mg/kg (39.9 ± 1.2 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 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).