

**Disposition of Radioactivity 2 h Following Oral Gavage Administration of 100 mg/kg  
[<sup>14</sup>C]HMB to Male Harlan Sprague Dawley Rats (Group G)<sup>a</sup>**

**Dose Recovered in Excreta (%)**

| End of Collection Period (h) | Urine CPDE <sup>b</sup> | Cage Rinse CPDE | Feces CPDE        | GI Content  | Total |
|------------------------------|-------------------------|-----------------|-------------------|-------------|-------|
| 2 <sup>c</sup>               | 0.139 ± 0.258           | 0.440 ± 0.836   | 0.00359 ± 0.00589 | 56.6 ± 24.9 | 65.6  |

**Disposition in Tissues**

| Tissue               | nmol-eq HMB per g Tissue | Tissue/Blood Ratio | Recovery (%)      |
|----------------------|--------------------------|--------------------|-------------------|
| Blood <sup>d</sup>   | 142 ± 58                 | unity              | 2.43 ± 1.25       |
| Adipose <sup>d</sup> | 151 ± 135                | 1.39 ± 1.71        | 2.41 ± 2.09       |
| Muscle <sup>d</sup>  | 28.0 ± 16.6              | 0.197 ± 0.071      | 2.64 ± 1.71       |
| Skin <sup>d</sup>    | 83.2 ± 75.6              | 0.568 ± 0.336      | 3.74 ± 3.64       |
| Brain                | 5.23 ± 3.00              | 0.0378 ± 0.0190    | 0.00819 ± 0.00501 |
| Heart                | 39.9 ± 19.3              | 0.291 ± 0.053      | 0.0330 ± 0.0190   |
| Kidneys              | 250 ± 113                | 1.79 ± 0.59        | 0.419 ± 0.214     |
| Liver                | 298 ± 104                | 2.27 ± 0.54        | 2.76 ± 1.19       |
| Lung                 | 62.0 ± 21.5              | 0.476 ± 0.137      | 0.0700 ± 0.0288   |
| Spleen               | 43.8 ± 23.5              | 0.306 ± 0.049      | 0.0265 ± 0.0155   |
| Adrenals             | 188 ± 165                | 1.81 ± 2.25        | 0.00199 ± 0.00090 |
| Thymus               | 24.4 ± 7.3               | 0.217 ± 0.161      | 0.0110 ± 0.0038   |
| Thyroid              | 240 ± 146                | 2.06 ± 1.61        | 0.00059 ± 0.00034 |
| Urinary Bladder      | 9830 ± 17700             | 114 ± 225          | 0.145 ± 0.211     |
| Pancreas             | 96.6 ± 82.9              | 0.668 ± 0.368      | 0.0667 ± 0.0542   |
| Testes               | 27.2 ± 14.1              | 0.210 ± 0.171      | 0.0986 ± 0.0681   |
| Cecum                | 234 ± 233                | 1.91 ± 1.35        | 0.127 ± 0.132     |
| Large Intestine      | 187 ± 251                | 1.24 ± 1.28        | 0.182 ± 0.211     |
| Small Intestine      | 3050 ± 2150              | 21.9 ± 14.5        | 9.93 ± 5.02       |
| Stomach              | 1780 ± 1220              | 18.4 ± 17.1        | 2.36 ± 1.72       |

**Disposition Summary (% Dose Recovered )**

| Sample                 | Mean ± SD          |
|------------------------|--------------------|
| Urine + Cage Rinse     | 0.579 ± 1.094      |
| Urine                  | 0.139 ± 0.258      |
| Cage Rinse             | 0.440 ± 0.836      |
| Feces                  | 0.00359 ± 0.00589  |
| GI Content             | 56.6 ± 24.9        |
| Carcass                | 1.40 ± 3.14        |
| Tissues                | 27.5 ± 12.5        |
| <b>Total Recovered</b> | <b>99.0 ± 25.9</b> |

<sup>a</sup>All values expressed as mean ± standard deviation (SD) (N = 4). The actual dose delivered was 100 ± 1 mg/kg (88.2 ± 1.0 µCi).

<sup>b</sup>CPDE = Cumulative percent dose excreted.

<sup>c</sup>2 h urine collection includes urine present in the urinary bladder at study termination.

<sup>d</sup>Tissue 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.).