

Recovery of Radioactivity 24 Hours Following Single Oral Administration of  
 $\text{Na}_2^{51}\text{CrO}_4$  plus Nonradiolabeled  $\text{Na}_2\text{Cr}_2\text{O}_7$  (4  $\mu\text{mol}/\text{kg}$ ) to Male B6C3F<sub>1</sub> Mice (Study C)<sup>a</sup>

Distribution in Tissues in Fasted Mice (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood <sup>b</sup>	3.32 $\pm$ 0.33	unity	3.94 $\pm$ 0.13
Forestomach <sup>c</sup>	1.27 $\pm$ 0.59	0.413 $\pm$ 0.187	0.0649 $\pm$ 0.0525
Glandular Stomach <sup>c</sup>	1.49 $\pm$ 0.20	0.482 $\pm$ 0.062	0.129 $\pm$ 0.048
Duodenum <sup>c</sup>	1.68 $\pm$ 0.37	0.545 $\pm$ 0.118	0.201 $\pm$ 0.088
Jejunum <sup>c</sup>	1.53 $\pm$ 0.49	0.498 $\pm$ 0.169	0.358 $\pm$ 0.215
Ileum <sup>c</sup>	1.57 $\pm$ 0.59	0.509 $\pm$ 0.184	0.115 $\pm$ 0.043
Cecum <sup>c</sup>	2.15 $\pm$ 0.68	0.703 $\pm$ 0.240	0.118 $\pm$ 0.018
Large Intestine <sup>c</sup>	1.55 $\pm$ 0.50	0.504 $\pm$ 0.170	0.171 $\pm$ 0.104

Distribution in Tissues in Fed Mice (24 hours)

Tissue	nmol-eq Chromium per g Tissue	Tissue/Blood Ratio	% Dose in Total Tissue
Blood <sup>b</sup>	1.75 $\pm$ 1.54	unity	2.16 $\pm$ 1.90
Forestomach <sup>c</sup>	0.605 $\pm$ 0.185	0.200 $\pm$ 0.061	0.0299 $\pm$ 0.0141
Glandular Stomach <sup>c</sup>	0.930 $\pm$ 0.202	0.307 $\pm$ 0.070	0.0804 $\pm$ 0.0256
Duodenum <sup>c</sup>	0.649 $\pm$ 0.308	0.215 $\pm$ 0.103	0.143 $\pm$ 0.070
Jejunum <sup>c</sup>	0.438 $\pm$ 0.383	0.144 $\pm$ 0.126	0.0724 $\pm$ 0.0552
Ileum <sup>c</sup>	0.403 $\pm$ 0.328	0.132 $\pm$ 0.108	0.0162 $\pm$ 0.0121
Cecum <sup>c</sup>	0.707 $\pm$ 0.579	0.233 $\pm$ 0.191	0.0498 $\pm$ 0.0373
Large Intestine <sup>c</sup>	0.585 $\pm$ 0.547	0.193 $\pm$ 0.182	0.0812 $\pm$ 0.0759

% Dose Recovered

Sample	Fasted	Fed
GI Tissues	1.16 $\pm$ 0.25	0.440 $\pm$ 0.219
Blood and GI Tissues	5.09 $\pm$ 0.38	2.63 $\pm$ 2.16

<sup>a</sup>All values expressed as mean  $\pm$  standard deviation (SD) (N = 3 for fasted mice and N = 4 for fed mice.) The target dose was 4  $\mu\text{mol}$  chromium/kg. The actual dose delivered was 4.09  $\pm$  0.41  $\mu\text{mol}/\text{kg}$  (8.74  $\pm$  0.74  $\mu\text{Ci}$ ). (N = 7).

<sup>b</sup>Percent of dose in blood was calculated using the following percentages of body weight: blood 4.9% (International Life Sciences Institute. 1994. Physiological parameter values for PBPK models.)

<sup>c</sup>Does not include contents.