

Disposition of Radioactivity 24 Hours Following Oral Gavage Administration of 4 mg/kg [¹⁴C]DTBBA to Male Harlan Sprague Dawley Rats (Group G)^a

Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE ^b	Cage Rinse CPDE	Feces CPDE	Volatile Organics CPDE	CO ₂ CPDE	GI Content	Total CPDE
4	8.19 ± 5.91	3.22 ± 3.19	—	0.0175 ± 0.0042	0.167 ± 0.052	—	11.6
8	25.5 ± 2.3	7.78 ± 3.39	—	0.0180 ± 0.0040	0.168 ± 0.052	—	33.5
12	30.9 ± 3.5	9.44 ± 4.11	—	0.0185 ± 0.0048	0.173 ± 0.055	—	40.5
24 ^c	33.5 ± 3.6	10.7 ± 4.5	29.0 ± 10.8	0.0326 ± 0.0075	0.320 ± 0.094	4.61 ± 2.32	78.5

Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR ^e Mean	TBR SD	Percent Recovery Mean	Percent Recovery SD
Blood ^d	0.0446	0.0157	unity	—	0.0381	0.0143
Adipose ^d	0.0513	0.0405	1.10	0.66	0.0428	0.0345
Muscle ^d	0.0156	0.0185	0.317	0.303	0.0754	0.0902
Skin ^d	0.0430	0.0211	0.917	0.221	0.0947	0.0498
Brain	0.00217	0.00285	0.0390	0.0437	0.00020	0.00026
Heart	0.0150	0.0119	0.307	0.190	0.00061	0.00049
Kidneys	0.198	0.088	4.43	1.00	0.0162	0.0080
Liver	0.172	0.050	4.00	0.71	0.0809	0.0223
Lung	0.0402	0.0156	0.908	0.176	0.00258	0.00104
Spleen	0.0181	0.0152	0.399	0.225	0.00053	0.00044
Adrenals	0.0631	0.0432	1.48	1.03	0.00016	0.00011
Thymus	0.00751	0.00874	0.152	0.135	0.00016	0.00018
Thyroid	0.332	0.552	5.86	8.07	0.00089	0.00139
Urinary Bladder	0.706	0.504	17.9	11.7	0.00184	0.00164
Pancreas	0.0459	0.0410	0.989	0.600	0.00258	0.00210
Testes	0.00978	0.01234	0.180	0.194	0.00143	0.00169
Cecum	1.01	0.55	23.4	12.2	0.0323	0.0163
Large Intestine	0.469	0.214	10.1	3.3	0.0306	0.0147
Small Intestine	0.513	0.282	10.8	4.0	0.115	0.067
Stomach	0.534	0.225	13.1	6.4	0.0355	0.0145

Disposition Summary—Dose Recovered (%)

Sample	Percent Recovered Mean	Percent Recovered SD
Urine + Cage Rinse	44.2	7.8
Urine	33.5	3.6
Cage Rinse	10.7	4.5
Feces	29.0	10.8
Volatile Organics	0.0326	0.0075
CO ₂	0.320	0.094
GI Content	4.61	2.32
Carcass	0.0592	0.1323
Tissues	0.631	0.292
Total Recovered	79.1	16.4

^aAll values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 4 mg DTBBA/kg. The actual dose delivered was 3.90 ± 0.17 mg/kg (43.1 ± 1.9 µCi).

^bCPDE = Cumulative percent dose excreted

^c24 hour (h) urine collection included 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).

^eTBR = tissue to blood ratio