ATC Results for the RC Rat-Only Weight Regression Excluding Chemicals with Specific Mechanisms of Action
2000 mg/kg Upper Limit
46 Chemicals for the 3T3 NRU; 47 Chemicals for the NHK NRU

Summary of Animals Used by Cell Type

Cell Type	Sigma	Method	No. Animals Dead	% Animals Dead	Std. Error (dosed)	No. Animals Dosed	Difference	P-value*	% Savings
NHK	0.12	Cyto	2.43	27.3%	0.305	8.91	1.94	**< .0001**	17.9%
		Default	2.97	27.4%	0.208	10.84			
	0.25	Cyto	2.58	28.6%	0.286	9.03	1.84	**< .0001**	16.9%
		Default	3.14	28.9%	0.189	10.87			
	0.5	Cyto	2.91	31.5%	0.260	9.25	1.68	**< .0001**	15.4%
		Default	3.47	31.8%	0.155	10.93			
	1.25	Cyto	3.65	37.6%	0.194	9.70	1.30	**< .0001**	11.8%
		Default	4.24	38.5%	0.094	11.00			
	2	Cyto	4.02	40.2%	0.175	10.02	1.08	**< .0001**	9.8%
		Default	4.57	41.1%	0.065	11.10			
					Average Animal Difference:		1.57		
3T3	0.12	Cyto	2.42	28.3%	0.327	8.53	2.28	**< .0001**	21.1%
		Default	3.03	28.0%	0.211	10.81			
	0.25	Cyto	2.58	29.6%	0.315	8.71	2.12	**< .0001**	19.6%
		Default	3.21	29.6%	0.191	10.84			
	0.5	Cyto	2.92	32.4%	0.288	9.00	1.90	**< .0001**	17.4%
		Default	3.55	32.6%	0.157	10.90			
	1.25	Cyto	3.66	38.2%	0.227	9.60	1.38	**< .0001**	12.5%
		Default	4.29	39.1%	0.096	10.98			
	2	Cyto	4.06	40.6%	0.207	10.00	1.10	**< .0001**	9.9%
		Default	4.61	41.6%	0.067	11.10			
					Average Animal Difference:		1.76		

*P-Value is from one-side Wilcoxon Signed Ranked test for difference in animal use between the default and cytotoxicity methods.Boldfaced values are significant values at p< 0.05.

Summary of Animals Used by GHS Toxicity Category and Cell Type

Category	Cell Type	Sigma	Method	No. Animals Dead	Std. Error (dosed)	No. Animals Dosed	Difference	P-value*	% Savings
1	NHK	0.12	Cyto	7.73	0.578	7.76	1.24	0.0938	13.8%
			Default	8.98	0.002	9.00			
		0.25	Cyto	7.61	0.608	7.84	1.25	0.0781	13.8%
			Default	8.85	0.052	9.09			
		0.5	Cyto	7.40	0.651	8.11	1.27	**0.0313**	13.5%
			Default	8.66	0.115	9.37			
		1.25	Cyto	6.91	0.646	8.79	1.25	**0.0156**	12.5%
			Default	8.10	0.121	10.04			
		2	Cyto	6.59	0.654	9.32	1.26	0.2188	11.9%
			Default	7.69	0.098	10.57			
				Average Animal Difference:			1.25		
	3T3	0.12	Cyto	6.81	0.856	6.84	2.16	**0.0156**	24.0%
			Default	8.97	0.001	9.00			
		0.25	Cyto	6.69	0.838	6.93	2.16	**0.0156**	23.7%
			Default	8.85	0.047	9.09			
		0.5	Cyto	6.53	0.829	7.23	2.12	0.0781	22.6%
			Default	8.65	0.111	9.35			
		1.25	Cyto	6.13	0.830	7.93	2.09	0.1563	20.9%
			Default	8.10	0.114	10.02			
		2	Cyto	5.87	0.863	8.40	2.19	**0.0469**	20.6%
			Default	7.69	0.092	10.59			
				Average Animal Difference:			2.14		
2	NHK	0.12	Cyto	3.14	0.268	9.52	2.62	0.0625	21.6%
			Default	5.82	0.085	12.14			
		0.25	Cyto	3.09	0.304	9.74	2.43	0.0625	20.0%
			Default	5.70	0.065	12.17			
		0.5	Cyto	3.39	0.331	9.87	2.33	0.0625	19.1%
			Default	5.86	0.039	12.20			
		1.25	Cyto	4.01	0.447	9.28	2.73	0.0625	22.7%
			Default	6.31	0.076	12.01			
		2	Cyto	4.11	0.506	8.87	2.98	0.0625	25.2%
			Default	6.33	0.040	11.85			
				Average Animal Difference:			2.62		
	3T3	0.12	Cyto	3.79	0.537	10.18	1.96	0.1250	16.1%
			Default	5.82	0.080	12.13			
		0.25	Cyto	3.77	0.519	10.40	1.76	0.1250	14.5%
			Default	5.68	0.063	12.16			
		0.5	Cyto	4.07	0.502	10.52	1.70	0.1250	13.9%
			Default	5.89	0.052	12.22			
		1.25	Cyto	4.75	0.519	10.14	1.86	0.1250	15.5%
			Default	6.30	0.055	11.99			
		2	Cyto	4.83	0.633	9.86	2.02	0.1250	17.0%
			Default	6.33	0.046	11.88			
				Average Animal Difference:			1.86		

Summary of Animals Used by GHS Toxicity Category and Cell Type

Category	Cell Type	Sigma	Method	No. Animals Dead	Std. Error (dosed)	No. Animals Dosed	Difference	P-value*	% Savings
3	NHK	0.12	Cyto	3.03	0.606	9.80	-0.06	0.8125	-0.6%
			Default	3.55	0.490	9.74			
		0.25	Cyto	3.04	0.439	9.86	0.29	> .9999	2.8%
			Default	3.73	0.494	10.15			
		0.5	Cyto	3.29	0.262	10.19	0.55	0.4375	5.2%
			Default	4.13	0.388	10.75			
		1.25	Cyto	3.99	0.311	10.60	1.03	0.1563	8.8%
			Default	4.95	0.166	11.63			
		2	Cyto	4.30	0.446	10.42	1.33	0.1563	11.3%
			Default	5.34	0.065	11.75			
				Average Animal Difference:			0.63		
	3T3	0.12	Cyto	3.05	0.125	9.24	0.48	0.5000	4.9%
			Default	3.54	0.477	9.72			
		0.25	Cyto	3.06	0.129	9.49	0.65	0.3125	6.4%
			Default	3.73	0.476	10.14			
		0.5	Cyto	3.34	0.086	9.92	0.79	0.4375	7.3%
			Default	4.15	0.373	10.70			
		1.25	Cyto	4.10	0.319	10.60	1.05	0.1563	9.0%
			Default	4.98	0.165	11.64			
		2	Cyto	4.49	0.406	10.66	1.09	0.0625	9.3%
			Default	5.35	0.067	11.75			
				Average Animal Difference:			0.81		
4	NHK	0.12	Cyto	3.03	0.118	9.21	0.01	0.7188	0.1%
			Default	3.04	0.125	9.21			
		0.25	Cyto	3.01	0.134	9.43	-0.01	0.4688	-0.1%
			Default	3.02	0.136	9.42			
		0.5	Cyto	3.15	0.080	9.79	0.00	0.9375	0.0%
			Default	3.13	0.082	9.79			
		1.25	Cyto	3.67	0.073	10.58	-0.01	0.5781	-0.1%
			Default	3.66	0.071	10.57			
		2	Cyto	4.13	0.086	11.09	-0.03	0.9375	-0.3%
			Default	4.10	0.073	11.05			
				Average Animal Difference:			-0.01		
	3T3	0.12	Cyto	3.03	0.130	9.24	-0.03	0.5625	-0.4%
			Default	3.03	0.114	9.20			
		0.25	Cyto	3.03	0.123	9.43	-0.02	0.5625	-0.2%
			Default	3.03	0.129	9.41			
		0.5	Cyto	3.16	0.067	9.77	0.02	0.4688	0.2%
			Default	3.13	0.084	9.79			
		1.25	Cyto	3.68	0.078	10.59	-0.03	0.4688	-0.3%
			Default	3.64	0.073	10.55			
		2	Cyto	4.13	0.064	11.09	-0.03	0.6875	-0.3%
			Default	4.10	0.093	11.06			
				Average Animal Difference:			-0.02		

Summary of Animals Used by GHS Toxicity Category and Cell Type

Category	Cell Type	Sigma	Method	No. Animals Dead	Std. Error (dosed)	No. Animals Dosed	Difference	P-value*	% Savings
5	NHK	0.12	Cyto	0.46	0.795	9.62	2.28	**0.0195**	19.2%
			Default	0.47	0.042	11.90			
		0.25	Cyto	1.18	0.633	9.81	1.77	**0.0322**	15.3%
			Default	1.18	0.092	11.59			
		0.5	Cyto	1.84	0.448	9.96	1.23	**0.0137**	11.0%
			Default	1.85	0.088	11.19			
		1.25	Cyto	2.89	0.212	10.19	0.58	**0.0049**	5.4%
			Default	2.89	0.038	10.77			
		2	Cyto	3.45	0.100	10.58	0.26	0.0830	2.4%
			Default	3.37	0.019	10.84			
				Average Animal Difference:			1.23		
	3T3	0.12	Cyto	0.46	0.822	8.83	3.07	**0.0020**	25.8%
			Default	0.46	0.044	11.90			
		0.25	Cyto	1.16	0.674	9.19	2.39	**0.0098**	20.6%
			Default	1.18	0.095	11.59			
		0.5	Cyto	1.83	0.472	9.50	1.67	**0.0049**	15.0%
			Default	1.86	0.079	11.18			
		1.25	Cyto	2.90	0.219	9.99	0.77	**0.0049**	7.1%
			Default	2.90	0.041	10.75			
		2	Cyto	3.48	0.112	10.51	0.32	**0.0186**	2.9%
			Default	3.36	0.014	10.83			
				Average Animal Difference:			1.64		
6	NHK	0.12	Cyto	0.00	0.810	7.96	4.04	**0.0078**	33.7%
			Default	0.00	0.000	12.00			
		0.25	Cyto	0.04	0.809	7.96	4.04	**0.0098**	33.7%
			Default	0.04	0.000	12.00			
		0.5	Cyto	0.56	0.761	8.13	3.79	**0.0029**	31.8%
			Default	0.57	0.019	11.92			
		1.25	Cyto	1.96	0.481	8.95	2.37	**0.0010**	20.9%
			Default	2.17	0.048	11.32			
		2	Cyto	2.70	0.309	9.53	1.51	**0.0098**	13.7%
			Default	2.86	0.023	11.04			
				Average Animal Difference:			3.15		
	3T3	0.12	Cyto	0.00	0.819	7.62	4.38	**0.0078**	36.5%
			Default	0.00	0.000	12.00			
		0.25	Cyto	0.05	0.823	7.63	4.37	**0.0098**	36.4%
			Default	0.05	0.001	12.00			
		0.5	Cyto	0.58	0.773	7.82	4.08	**0.0098**	34.3%
			Default	0.61	0.026	11.90			
		1.25	Cyto	1.96	0.497	8.80	2.49	**0.0059**	22.1%
			Default	2.19	0.048	11.29			
		2	Cyto	2.74	0.311	9.47	1.52	**0.0098**	13.8%
			Default	2.90	0.026	10.99			
				Average Animal Difference:			3.37		

*P-Value is from one-side Wilcoxon Signed Ranked test for difference in animal use between the default and cytotoxicity methods. **Boldfaced** values are significant values at $p < 0.05$.