

Sister Chromatid Exchange (SCE) Frequencies in Chinese Hamster Ovary (CHO) Cells Exposed to Monosodium Cyanurate for 2 Hours With Metabolic Activation

Treatment	Cyto-genetic-ist*	No. of SCE's	No. of Chromosomes	Chromosomes/Cell (Mean ± SD)	SCEs/Cell [†] (Mean ± SE)	SCEs/Chromosome [†] (Mean ± SE)
Negative Control (complete metabolic activation mixture)	A	529	953	19.06 ± 0.89	10.58 ± 0.46	0.555 ± 0.024
	B	568	992	19.84 ± 1.15	11.36 ± 0.48	0.573 ± 0.024
Monosodium cyanurate (µg/ml)						
93.6 [‡]	A	600	949	18.98 ± 0.68	12.00 ± 0.49	0.632 ± 0.026
	B	550	974	19.48 ± 1.13	11.00 ± 0.47	0.565 ± 0.024
187.2 [‡]	A	613	955	19.10 ± 0.93	12.26 ± 0.50	0.642 ± 0.026
	B	612	973	19.46 ± 0.95	12.24 ± 0.49	0.629 ± 0.025
375 [‡]	A	476	961	19.22 ± 0.91	9.52 ± 0.44	0.495 ± 0.023
	B	567	971	19.42 ± 1.03	11.34 ± 0.48	0.584 ± 0.025
750 ^{‡§}	A	534	947	18.94 ± 0.68	10.68 ± 0.46	0.564 ± 0.024
	B	575	978	19.56 ± 1.15	11.50 ± 0.48	0.588 ± 0.025
1500 ^{‡§}	A	547	965	19.30 ± 0.76	10.94 ± 0.47	0.567 ± 0.024
	B	729	979	19.58 ± 1.01	14.58 ± 0.54	0.745 ± 0.028
Positive Control	A	1309	943	18.86 ± 0.97	26.18 ± 0.72	1.388 ± 0.038
	B	1667	978	19.56 ± 1.11	33.34 ± 0.82	1.704 ± 0.042

* Each cytogeneticist analyzed 50 cells per sample.

† A one-way analysis of variance comparing the SCE frequencies in CHO cells exposed to monosodium cyanurate and to the negative control indicated that the variance between treatment groups was not significantly greater than the variance within treatment groups.

‡ A crystalline material failed to go into solution during dilution of the test article in metabolic mixture at these concentrations.

§ Additional material precipitated from the metabolic activation mixture.