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Evaluation of the Genetic Toxicity of Synthetic Chemicals (IV) - Chromosomal Aberration Assay With 11 compounds in Chinese Hamster Lung Cells *in vitro* -

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We performed chromosomal aberration assay in Chinese Hamster Lung (CHL) cells *in vitro* to evaluate the clastogenicity of 11 synthetic chemicals which were listed in Toxicity Evaluation Program of Ministry of Environment of Republic of Korea in 1996. All of the chemicals were carried out MTT assay to determine the 50% cell growth inhibition concentration. All compounds were tested with and without metabolic activation system.

Benzoyl chloride revealed positive result at 43 $\mu\text{g}/\text{ml}$ in the presence of metabolic activation system, and at 30.8, 61.5 and 123 $\mu\text{g}/\text{ml}$ in the absence of metabolic activation system. And p-phenoxy ethanol was observed as positive with the metabolic activation system, but negative without metabolic activation system. Especially 2-propyn-1-ol showed high frequency of pulverization and showed critical difference of cytotoxicity between with and without S9 mixture. Pulverization is not included in the frequency of structural aberration in our criteria. Dicyclopentadiene, methacrylic acid, aa-dimethylbenzyl hydroperoxide, benzylbutyl phthalate, and p-chlorophenol were revealed negative results.

포스터 발표

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