

P-70

MUTAGENICITY TESTS OF A NEW CEPHALOSPORIN ANTIBIOTIC AGENT, IDC-7181

Mei-Shu Zheng, Ji-Soon Sin, Young-Bang Kwon, Sang-Yoon Nam, and Jong-Koo Kang

College of Veterinary Medicine, Chungbuk National University, Cheongju 361-763, Korea

The mutagenic potency of a new antibiotics, IDC-7181, was evaluated using the mutagenicity tests including Ames, chromosome aberration and micronucleus tests. In bacterial reversion assay, IDC-7181 did not show any mutagenic response in the absence or presence of S9 mixture with *Salmonella typhimurium* TA98, TA100, TA1535 and TA1537 and *E. coli* WP2uvrA-(100, 50, 25, 12.5 and 6.25 $\mu\text{g}/\text{plate}$). In chromosome aberration test, IDC-7181 did not show any significant effect on Chinese hamster lung fibroblast cells compared with control (5, 2.5 and 1.25 mg/ml). In micronucleus test, no significant increase in the occurrence of micronucleated polychromatic erythrocytes was observed in ICR male mice intraperitoneally administered with IDC-7181 at the doses of 2, 1 and 0.5 $\mu\text{g}/\text{kg}$. These results indicate that IDC-7181 has no mutagenic potency both *in vitro* and *in vivo* systems.