

D-57 The Effects of Replication Inhibitors on Mutagen-Induced SCEs in Chinese Hamster Ovary cells

김 선 영*, 류 민 정, 엄 경 일
동아대학교 자연과학대학 생물학과

The purpose of this study is to investigate the effects of 3-aminobenzamide(3-AB), an inhibitor of poly(ADP-ribose) polymerase, 2',3'-dideoxythymidine 5'-triphosphate(ddTTP), an inhibitor of DNA polymerase β , and 2,4-dinitrophenol(DNP) which exhausts ATP on SCEs induced by pretreatment with ultraviolet radiation(UV) and subsequent treatment with UV or Ethyl methanesulfonate(EMS) in Chinese hamster ovary(CHO) cells. The treatments with inhibitors during incubation after 1 J/m²UV irradiation have no effect on the yield of SCEs. On the other hand, the treatments with inhibitors during incubation after pretreatment with 1 J/m²UV increased the yield of SCEs induced by treatment with 5 J/m²UV or 8 mM EMS. These results suggest that 3-AB, ddTTP and DNP increase the yield of SCEs induced by pretreatment with UV and subsequent treatment with UV or EMS in CHO cells.

D-58 cDNA Sequence Corresponding to Cecropin-like Peptides from *Artogeia rapae*

방 인 석*, 정 경 용, 여 성 문
단국대학교 자연과학대학 생물과학부

Cecropin is the most potent antibacterial peptide in Lepidoptera. On the basis of known cDNA cecropin sequences, degenerated primers were designed. Partial cDNA sequences showing high homologies with cecropins were obtained from the fatbody of *Artogeia rapae* by RT-PCR and subcloned into the T-vector.

cDNA library was constructed with mRNA isolated from the fatbody of immunized cabbageworms in Uni-ZAP XR Vector (ZAP-cDNA Gigapack II Gold Cloning Kit). Cecropin-like peptides are now being screened with probe which is prepared using the subcloned cDNA fragment.

Complete cDNA sequences and possible secretory mechanism into the haemolymph will be shown by the screening of cDNA library.