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**Enu is a Powerful Mutagen for Development Mutant Mice
-Sixty-Six Mutants From Enu Mutagenesis Program in Kit/KRICT-**

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ENU(ethylnitrosourea) mutagenesis has been carrying out since 1999 in Korea Institute of Toxicology (KIT), Korea Research Institute Chemical of Technology (KRICT). We have chosen BALB/c and C57BL/6 and screened for dominant and recessive mutants. Four hundred and twenty one males(G0) have been injected with ENU, 150, 200, 250 and 300 mg/kg body weight, twice, one week apart. The injected mice were mated with 1,898 normal BALB/c and 292 C57BL/6 females, 4 to 12 females per male. One hundred and ninety three G1 males were chosen and mated to 747 normal females to produce 5,710 G2 mice. Among these, 1,384 G2 females were backcrossed to corresponding parental G1 males, and 10,365 G3 mice have been obtained from them. Two hundred and seventy two G1 phenodeviants were tested for inheritance, and found 26 dominant mutants. There were 38 recessive mutants, among 193 G1 micropedigree. These mutants, which were discovered within 3-10 weeks of age, showed tremor (2 lines), wiggle (1), circling (2), head tosser (2), startle response (2), myotonia (1), bent tail (10), short face (6), small body size (10), microgenia (3), coat color (8), no whisker (1), dystrophy (1), high total cholesterol (4), high glucose (1), high LDL cholesterol (1), LDL cholesterol (1), Hyperglycemia (1), cataract (5), eyelid closed (1), limb grasping (1), club-foot (1) and microdactylia (1). Total 66 mutants will be shown and discussed in this meeting.

Keyword : ENU mutagenesis, disease model animal, mutant mice