SL803 The *unc-29* (LG I) Region of *Caenorhabditis elegans*: Genetic Analysis of Lethal Mutants

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The *unc-29* region on the chromosome I of *Caenorhabditis elegans* has been mutagenized in order to obtain lethal mutations. In this screen, uncoordinated phenotype of *unc-29* (*e193*) mutant was used to identify any lethal mutations closely linked to the *unc-29* gene, which encodes a subunit of nicotinic acetylcholine receptors. We have isolated 6 independent mutants (*jh1* to *jh6*) out of approximately 5,200 ethyl methanesulfonate (EMS) treated haploids. Four of the six mutants demonstrated embryonic lethal phenotypes, while the other two showed embryonic and larval lethal phenotypes. Terminal phenotypes observed in two mutants (*jh1* and *jh2*) indicated developmental defects specific to posterior part of embryos which appeared similar to the phenotypes observed in *nob* (no back end) mutants. Another mutant (*jh4*) showed an interesting phenotype of body-wall muscle degeneration at larval stage.

These mutations were mapped by three-factor crosses and deficiency mutants in this region. Here we report genetic analysis and characterization of these lethal mutants.