Invitrogen BioReliance® LADS Genotyping

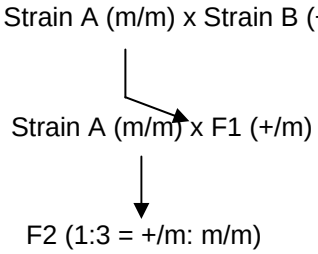
Fast Phenotype / Mutation Mapping

Have you observed an unusual phenotype or mutation in a rodent and want to know which chromosome it maps to? Invitrogen provides an answer in 2 months. We offer genotyping chromosomal linkage analysis for mutations and phenotypes. This is a PCR based system of linkage analysis to map spontaneous mutations and phenotypes to specific chromosomes.

Microsatellite markers and single nucleotide polymorphism (SNP) markers associated with specific strains of mice or rats have been linked to specific chromosomes and loci within the chromosomes. Analyzing the correlation between a specific marker and the presence of the studied mutation or phenotype allows the investigator to statistically map the location of the mutation or phenotype of interest with increased accuracy and decreased time and cost.

General Methodology:

1. Crosses:



2. Sample Type: Small piece of tail from 60 animals (30 +/m and 30 m/m)
3. Total Range of Sampling: 15 tails from Strain A and 15 tails from Strain B

Invitrogen LADS will do the following:

1. Background Characterization: develop a microsatellite PCR fingerprint specific for each strain. 60 markers spread 15-20cM apart, corresponding to 100% of the genome, will be selected.
2. Genotyping:
   a. Analyze the DNA from wild type and mutant phenotype with the 60 microsatellite markers identified in the background characterization.
   b. Analyze DNA with markers shown to be close to the mutation locus.
   c. Confirm position by testing 5 additional markers in the region identified as the mutation locus.

Approximate Cost (please inquire for pricing tailored to your project):

Background Characterization……..$4,000
Genotyping…… $12,000-$15,000

Call or email us today to speak with someone about your project: email: ahs@bioreliance.com
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