# A New Recessive Hair Mutation on Chromosome 1

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Mutation (allele) symbol: *slck* 

Mutation (allele) name: slick hair

Gene symbol: slck

Strain of origin: CXJ1/SalkJ

Current strain name: CXJ1/SalkJ-slck/J

Stock #006603 (jaxmice.jax.org)

Phenotype categories: hair and skin

#### **Origin and Description**

A new recessive mutation that causes mice to have a disheveled coat has been discovered in a colony of CXJ1/SalkJ mice at the Jackson Laboratory, and has been mapped to Chromosome 1.

Mice homozygous for this recessive mutation are recognized by unkempt hair. At three weeks of age the phenotype is obvious and by five weeks of age the hair is less disheveled. Homozygous mice have no behavioral abnormalities, live normal life spans and breed normally. The colony is maintained by mating homozygous mice to heterozygous mice.



Disheveled hair from a mouse homozygous for the *slck* mutation is shown on the left and hair from a control on the right.

## **Genetic Analysis**

Using the standard mapping protocol of The Mouse Mutant Resource, CXJ1/SlkJ-*slck*/J homozygous mice were mated to SWR/J mice. The F1 progeny from these matings were then intercrossed and 71 of the affected F2's were used for linkage analysis. This mutation was mapped distal to *D1Mit373* (26.5 Mb) and proximal to *D1Mit21* (66.9 Mb).

A search of MGI did not indicate any obvious gene candidates in this region.

## Pathology

A pathological screen was performed on three homozygous mice at four weeks of age and four homozygous mice at six weeks of age, and the eyes of two homozygous mice and 2 heterozygous at three weeks of age were examined. No gross abnormalities were observed. Hearing as assessed by auditory brainstem response (ABR) testing of four homozygous mutants at four weeks of age revealed no hearing loss.

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