These Gab2 knockout mice exhibit an impaired mast cell response (degranulation, cytokine expression), a diminished allergic response, reduced mast cell numbers and reduced passive cutaneous and systemic anaphylaxis. This mutant mouse strain may be useful in studies of allergic reactions and anaphylaxis.

Donating Investigator

Benjamin Neel, NYU School of Medicine
Mice that are homozygous for the targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. Mast cell response (degranulation, cytokine expression) to stimulation of the IgE receptor FceR1 is impaired and results in a diminished allergic response. Passive cutaneous and systemic anaphylaxis is significantly reduced in these mice. Mast cell numbers are reduced in back and thigh skin and undetectable in the peritoneum.

This mutant mouse strain may be useful in studies of allergic reactions and anaphylaxis.

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.
Genotyping Protocols
Separated PCR: $Gab2$
Genotyping resources and troubleshooting

Breeding Considerations
While maintaining a live colony, these mice are bred as homozygotes.

Additional Breeding and Husbandry Support

Citation
When using the C.129S4-\textit{Gab2}^{tmF1-hg}/Mmjax mouse strain in a publication, please cite the originating article(s) and include MMRRC stock #32100 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

\textit{Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200}

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