These mice lack integrin alpha M expression and exhibit diminished neutrophil activation during inflammation.

Donating Investigator

Tanya Mayadas, Brigham and Women's Hosp/Harvard Med Sch
Mice that are homozygous for the $ltgam^{tm1Myd}$ targeted mutation are viable, fertile, normal in size, and do not display any gross physical or behavioral abnormalities. No $ltgam$ protein is detected in homozygous mutant neutrophils. Homozygous null animals have a diminished ability to clear thioglycollate-induced neutrophils, have reduced mast cell numbers in the dorsal skin and peritoneal wall/cavity, and are less susceptible to cerebral ischemia/reperfusion injury. Neutrophils from these animals are deficient at spreading, phagocytosing complement-opsonized particles, and in several Fc-mediated functions. They also exhibit impaired oxidative burst and a diminished responsiveness in LPS- and taxol-mediated gene expression.
Genotyping Protocols
Standard PCR: Itgam<sup>tm1Myd</sup>

Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K20 formulation (10% fat)

Breeding Considerations
This strain originated on a B6;129S4 background and has been backcrossed to C57BL/6 for at least ten generations. When maintaining a homozygous colony, the donating investigator advises replacing breeders every six months with the offspring from heterozygous matings, avoiding sibling matings. Coat color expected from breeding: Black

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the B6;129S4-Itgam<sup>tm1Myd/J</sup> mouse strain in a publication, please cite the originating article(s) and include JAX stock #003991 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
AX12 (Maximum)

Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.

Domestic
Pricing effective for USA, Canada and Mexico shipping destinations

Live Mouse
**AGE | SEX | GENOTYPE | PRICE**

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### Related Products and Services

| Frozen Mouse Embryo | B6.129S4-Itgam<sup>tm1Myd</sup>/J | $2595.00 |

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Licensing Information
Phone: 207-288-6470
Email: TechTran@jax.org

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