These targeted mutation mice express DsRedE2 from the endogenous Cxcl12 (chemokine (C-X-C motif) ligand 12), mouse promoter. DsRed (stained with anti-RFP) is primarily expressed by perivascular stromal cells and endothelial cells throughout the bone marrow. This strain is useful in marking cellular sources of CXCL12.

Donating Investigator

Sean J Morrison, University of Texas Southwestern Medical Center
**RESEARCH APPLICATIONS**

**Research Tools**

**BASE PRICE**

Starting at:

- $278.00 Domestic price for female
- 356.51 Domestic price for breeder pair

**Details**

**Detailed Description**

**Cxcl2** (chemokine (C-X-C motif) ligand 12), expressed by perivascular stromal cells, endothelial cells, and osteoblasts, is a chemokine required for hematopoietic stem cell (HSC) maintenance and retention in the bone marrow. It also promotes the proliferation and maintenance of B-lineage progenitors, and common lymphoid progenitors.

These targeted mutation mice express DsRed from the endogenous **Cxcl12** promoter. The DsRed knockin produces a strong loss of function phenotype. Bright fluorescence can be detected either directly or through anti-RFP immunohistochemistry. DsRed is primarily expressed by perivascular stromal cells and endothelial cells throughout the bone marrow. This strain is useful in marking cellular sources of CXCL12.

**Development**

**Expression Data**

**Control Suggestions**

**Selected References**
Genotyping Protocols
Separated PCR: DsRedMax
Standard PCR: DsRedMax
Standard PCR: Cxcl12

Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations
Heterozygotes are viable and fertile, but homozygotes are not. The DsRed knockin produces a strong loss of function phenotype.

Additional Breeding and Husbandry Support

Mating System
Heterozygote x Wild-type
Wild-type x Heterozygote

Citation
When using the STOCK Cxcl12^tm2.1Sjm/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #022458 in your Materials and Methods section.

Pricing & Availability
Live mice available in varying quantities. Ask Customer Service for details.
### Live Mouse

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<td>$278.00</td>
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### Breeder Pair

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### Related Products and Services

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Terms of Use
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**Related Strains**

- **All**
- **By Allele**