B6;C3Fe-Csf1op/J

Stock No: 000231 | **osteopetrosis**

Spontaneous Mutation

AVAILABLE

PLACE ORDER

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

Overview

Also Known As: osteopetrosis

Mice homozygous for the osteopetrosis spontaneous mutation (*Csf1*^{op}) may be useful to study the role of glia in neurological disease.

READ MORE +

GENETIC OVERVIEW

Genetic Background	Generation
	N77 (2019-10-04 00:00:00)

a

Allele Type	Gene Symbol	Gene Name

Spontaneous	*a*	nonagouti

Csf1^{op}

Allele Type	Gene Symbol	Gene Name
Spontaneous	*Csf1*	colony stimulating factor 1 (macrophage)

VIEW GENETICS

RESEARCH APPLICATIONS

Neurobiology Research
Developmental Biology Research
Mouse/Human Gene Homologs
Research Tools
Internal/Organ Research
Cancer Research
Endocrine Deficiency Research
Immunology, Inflammation and Autoimmunity Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

$278.00 Domestic price for female

483.90 Domestic price for breeder pair

VIEW PRICE LIST

Details

Detailed Description

Mice homozygous for the osteopetrosis spontaneous mutation (*Csf1*^{op}) are viable and exhibit osteopetrosis. The osteoclasts are the primary cell type affected in homozygous mutant mice. This results in a generalized macrophage deficiency, monocytopenia, and defective bone remodeling. Homozygous mutant mice also have abnormal calcium regulation, impaired dental growth and female mice fail to lactate. Total leukocyte counts are reduced and marrow cells are decreased to one-tenth of normal control mice. Homozygous mutant mice have a deficient microglia and macrophage response, and therefore may be useful tools to study the role of glia in neurological disease if mated to transgenic models of neurodegenerative disease.
Homozygous pups are identifiable by their phenotype at 10 days of age by absence of incisors and by a domed skull. Unfortunately, ~50% of homozygotes die around weaning age. If they are to survive the weaning process, they must be provided with crushed food in the bottom of the cage. A soft rodent diet could also be used. Those that survive weaning may live up to 6 months.

Development

Control Suggestions

Genetics

a

Csf1^{op}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CHAT OFFLINE

CONTACT TECHNICAL SUPPORT

Genotyping Protocols
Sanger sequencing:*Csf1*^{op}
Probe:*Csf1*^{op} Probe
Genotyping resources and troubleshooting

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

Breeding Considerations
Since 2010, The Jackson Laboratory live colony has been maintained by breeding mice heterozygous for *Csf1*^{op} to B6C3FeF1/J *a*/*a* mice (Stock No. 001022).
Additional Breeding and Husbandry Support

Mating System
Heterozygous x B6C3FeF1/J *a*/*a* Stock No. 001022
B6C3FeF1/J *a*/*a* Stock No. 001022 x Heterozygou

Appearance
black, osteopetrosis
Related Genotype: *a*/*a Csf1*^{op}/*Csf1*^{op}

black, unaffected
Related Genotype: *a*/*a Csf1*^{op}/+ or *a*/*a* ?/+

Citation
When using the osteopetrosis mouse strain in a publication, please cite the originating article(s) and include JAX stock #000231 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

FGB29 (Standard)

Pricing & Availability

Available

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

Domestic | **International**

Pricing effective for USA, Canada and Mexico shipping destinations

Live Mouse

AGE	SEX	GENOTYPE	PRICE
Approx 4-8 weeks	Female	Heterozygous for Csf1^{op}	$278.00
	Male	Heterozygous for Csf1^{op}	$278.00
Approx 4-8 weeks	Female	Wild-type for Csf1^{op}	$78.51
	Male	Wild-type for Csf1^{op}	$78.51

Breeder Pair

SEX	GENOTYPE	PRICE
Female	Heterozygous for Csf1^{op}	$483.90
Male	B6C3FeF1/J *a*/*a* (001022)	
Female	Heterozygous for Csf1^{op}	$556.00
Male	Heterozygous for Csf1^{op}	
Female	B6C3FeF1/J *a*/*a* (001022)	$483.90
Male	Heterozygous for Csf1^{op}	

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Terms of Use

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

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All

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