The Jackson Laboratory

STOCK *Trp53* ^{tm1Brd} *Brca1* ^{tm1Aash} Tg(LGB-cre)74Acl/J

Stock No: **012620** | BLG-Cre; Brca1 $^{F22-24}$; p53 KO

Targeted Mutation, Transgenic

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

PLACE ORDER

Email Download PDF Help

cancer 1 (*Brca1*) allele, and are heterozygous for p53 tumor-suppressor gene (*Trp53*) deficiency. This strain may be useful for studying human basal-like cancer and breast cancer, as well as providing a useful tool for testing new therapeutics.

Donating Investigator

Afshan McCarthy, The Breakthrough Toby Robins Breast Canc

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GENETIC OVERVIEW

Genetic Background

Generation

F?+F26
(2020-03-19 00:00:00)

Trp53^{tm1Brd}

Allele Type	Gene Symbol	Gene Name
Targeted (Null/Knockout)	*Trp53*	transformation related protein 53

Tg(LGB-cre)74Acl

Allele Type

Transgenic (Recombinase-expressing)

Brca1^{tm1Aash}

Allele Type	Gene Symbol	Gene Name
Targeted (Conditional ready (e.g. floxed), No functional change)	*Brca1*	breast cancer 1, early onset

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools
Endocrine Deficiency Research
Cancer Research
Neurobiology Research

VIEW ALL RESEARCH APPLICATION

BASE PRICE

Starting at:

$278.00 Domestic price for female 4-week

556.00 Domestic price for breeder pair

VIEW PRICE LIST

Details

Important Note

To induce the tumor development in these mice, the donating investigator reports that BLG-*Cre; Brca1*^{tm1Aash} *; Trp53*$^{+/-}$ mice should be allowed to go through two rounds of pregnancy and then set aside to allow Cre activation and the loss of Brca1 function.

Detailed Description

BLG-*Cre; Brca1*^{tm1Aash} *; Trp53*$^{+/-}$ mice that carry the beta-lactoglobulin Cre (BLG-*Cre*) transgene are homozygous for floxed exons 22-24 of the breast cancer 1 (*Brca1*) allele, and are heterozygous for p53 tumor-suppressor gene (*Trp53*) deficiency. Mice of this genotype are viable, fertile, normal in size and do not display any behavioral abnormalities. BLG-*Cre; Brca1*^{tm1Aash} *; Trp53*$^{+/-}$ females have expression of the BLG-*Cre* transgene during lactation; which leads to loss of *Brca1* function in the mammary gland. This results in formation of mammary tumors exhibiting high grade central necrosis and metaplastic elements in the form of spindle cell and squamous cell differentiation; as seen in human basal-like breast cancers and BRCA1 mutation carriers. Heterozygosity for the mutant p53 allele accelerates the formation of mammary tumors. This strain may be useful for studying human basal-like cancer and breast cancer, as well as providing a useful tool for testing new therapeutics.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Trp53^{tm1Brd}

Tg(LGB-cre)74Acl

Brca1^{tm1Aash}

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR:Tg(LGB-cre)74Acl
Standard PCR:Trp53
Standard PCR:Brca1
Genotyping resources and troubleshooting

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

To induce the tumor development in these mice, the donating investigator reports that *BLG-Cre; Brca1*$^{F22\text{-}24/F22\text{-}24}$ *; p53*$^{+/-}$ mice should be allowed to go through two rounds of pregnancy and then set aside to allow Cre activation and the loss of Brca1 function.

Additional Breeding and Husbandry Support

Mating System

Heterozygous Homozygous Noncarrier x Wildtype Homozygous Hemizygous AND Wildtype Homozygous Noncarrier x Heterozygous Homozygous Hemizygou

Citation

When using the BLG-Cre; Brca1$^{F22\text{-}24}$; p53 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #012620 in your Materials and Methods section.

Animal Health Reports

Facility Barrier Level Descriptions

AX10 (Standard)

Pricing & Availability

Available

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

Domestic **Internatic**

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE

AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
4 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
5 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
5 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
6 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for	$278.00

	SEX	Tg(LGB-cre)74Acl	
6 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
7 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
7 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
8 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
8 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
9 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
9 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
10 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
10 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
11 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
11 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
12 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	$278.00
12 weeks	Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00
	Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$278.00

BREEDER PAIR

SEX	GENOTYPE	PRICE
Female	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Noncarrier	$556.00
Male	Heterozygous for Trp53^{tm1Brd}, Homozygous for Brca1^{tm1Aash}, Hemizygous for Tg(LGB-cre)74Acl	

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	STOCK Trp53<tm1Brd> Brca1<tm1Aash> Tg(LGB-cre)74Acl/J Frozen	$2595.00

PAYMENT TERMS AND CONDITIONS

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

THE JACKSON LABORATORY'S GENOTYPE PROMISE

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. **Therefore, we cannot guarantee a strain's phenotype will meet all expectations.** To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

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General Terms and Conditions

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LICENSING INFORMATION

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Email: TechTran@jax.org

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By Allele

By Gene

By Collection

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Yes No