



# B 6 ; 1 2 9 S t<sup>tm2.1laai</sup> / J

Stock No: 017573 | Tet2<sup>f</sup>

Targeted Mutation



AVAILABLE

P L A C E O R D E R

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

## Overview

### Also Known As: Tet2<sup>f</sup>

These floxed mutant mice possess *loxP* sites flanking exon 3 of the *Tet2* gene. This strain may be used for the conditional knockout of *Tet2* for studying hematopoietic stem cell self-renewal and myeloid transformation.

### Donating Investigator

Iannis Aifantis, NYU School of Medicine

R E A D M O R E +

## GENETIC OVERVIEW

Genetic Background      Generation  
?+N2F17  
(2020-01-17 00:00:00)

*Tet2<sup>tm1.1/aai</sup>*

Allele Type	Gene Symbol	Gene Name
Targeted (Conditional ready (e.g. floxed), No functional change)	<i>Tet2</i>	tet methylcytosine dioxygenase 2

V I E W   G E N E T I C S

## RESEARCH APPLICATIONS

Research Tools

V I E W   A L L   R E S E A R C H   A P P L I C A T I O N S

## BASE PRICE

Starting at:

\$255.00 Domestic price for female 4-week

V I E W   P R I C E   L I S T

### Details

#### Detailed Description

Like *TET1* and *TET3*, *TET2* modifies DNA by hydroxylating 5 methylcytosine. A significant percentage of patients with myeloid malignancies exhibit mutations in *TET2*, of these, 41.5% of mutations occur in the first coding exon (mouse exon 3). These *Tet2<sup>ff</sup>* mice possess *loxP* sites flanking exon 3. Mice that are homozygous for the targeted mutation are viable, fertile and normal in size. When used in conjunction with a Cre recombinase-expressing strain, this strain is useful in generating tissue-specific mutants of the floxed allele. This mutant mouse strain may be useful in generating conditional mutations to study hematopoietic stem cell self-renewal and myeloid transformation.

For example, when crossed to a strain expressing interferon-inducible Cre recombinase (see Stock No. [003556](#)), mice exhibit increased hematopoietic stem cell self-renewal.

#### Development

#### Control Suggestions

#### Selected References

## – Genetics

+ [Tet2<sup>tm1.1laai</sup>](#)

## – Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

## – Technical Support

CHAT OFFLINE

CONTACT TECHNICAL SUPPORT

### Genotyping Protocols

Standard PCR: [Tet2<sup>tm1.1laai</sup>](#)

Standard PCR: [Tet2<sup>tm1.1laai</sup>](#)

[Genotyping resources and troubleshooting](#)

### Dietary Information

LabDiet® 5K52 formulation (6% fat)

### Breeding Considerations

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

[Additional Breeding and Husbandry Support](#)

### Mating System

Homozygote x Homozygote

### Citation

When using the [Tet2<sup>tm1.1laai</sup>](#) mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #017573 in your

[Materials and Methods](#) section.

[Facility Barrier Level Descriptions](#)

 [AX18 \(Maximum\)](#)

## – Pricing & Availability



Available

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

Domestic International

Live Mouse			
AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
5 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
6 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
7 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
8 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
9 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
10 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
11 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
12 weeks	Female	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00
	Male	Homozygous for Tet2 <sup>tm1.1laai</sup>	\$255.00

## Related Products and Services

Frozen Mouse Embryo	B6;129S-Tet2<tm1.1laai>/J Frozen Embryo	\$2595.00
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[General Terms and Conditions](#)

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### Licensing Information

Phone: 207-288-6470

Email: [TechTran@jax.org](mailto:TechTran@jax.org)

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All

By Allele

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