

## B6CBA-Tg(Prnp-TBP\*)105Xjl/J

Stock No: **008075**

 **Transgenic**

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

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inclusions of polyQ tracts in neurons, gliosis and neuron loss. This transgenic strain has a more severe phenotype and earlier onset of phenotype than B6CBA(FVB)-Tg(Prnp-TBP\*)71-16Xjl/J (Stock No. [008216](#)). B6CBA(FVB)-Tg(Prnp-TBP\*)13Xjl/J (Stock No. [008083](#)) can be used a control for this strain. This mutant mouse strain may be useful in studies of spinocerebellar ataxia 17 (SCA17) and polyglutamine (polyQ) related neurodegeneration.

### Donating Investigator

Xiao-Jiang Li, Emory University School of Medicine

[R E A D M O R E +](#)

## GENETIC OVERVIEW

**Genetic Background**

**Generation**

### Tg(Prnp-TBP\*)105Xjl

#### Alele Type

Transgenic (Inserted expressed sequence, Humanized sequence)

[V I E W G E N E T I C S](#)

## RESEARCH APPLICATIONS

Neurobiology Research

[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:

\$2,854.50 Domestic price Cryo Recovery

V I E W   P R I C E   L I S T

### Details

#### Detailed Description

These transgenic mice express a human TATA box binding protein, *TBP*, containing a 105 polyQ repeat expansion, under the control of the mouse prion protein promoter. The 105 polyQ-expansion is detected by Western blot analysis. At 3 months of age, hemizygous transgenic mice are smaller than wildtype littermates, appear ungroomed, exhibit kyphosis and weight loss. These transgenic mice have a shortened lifespan of 5 months and begin to die as early as 9 weeks of age. Immunohistochemical and Western blot analysis of brain tissue reveals neuronal nuclear aggregates of polyQ tracts by 8 weeks of age. Electron microscopic examination of brain tissue shows nuclear inclusions in cerebellar granule neurons and degeneration of Purkinje cells and axons. Reactive gliosis is observed in the granular and Purkinje layers. Loss of Purkinje cells is observed at 10 weeks of age. Apoptotic neurons in brain cortex and spinal cord are more abundant in transgenic mice when compared to wildtype. Early neurodegeneration is observed in the cerebral cortex. Onset of progressive locomotor impairment is 6 weeks of age. Some mice exhibit claspings, spontaneous seizures and tremors. The donating investigator has not attempted to make the strain homozygous. This transgenic strain has a more severe phenotype than B6CBA(FVB)-Tg(Prnp-TBP\*)71-16Xjl/J (Stock No. [008216](#)). B6CBA(FVB)-Tg(Prnp-TBP\*)13Xjl/J (Stock No. [008083](#)) can be used a control for this strain. This mutant mouse strain may be useful in studies of spinocerebellar ataxia 17 (SCA17) and polyglutamine (polyQ) related neurodegeneration.

#### Development

#### Expression Data

#### Control Suggestions

#### Selected References

### Genetics

#### Tg(Prnp-TBP\*)105Xjl

## ⊖ Disease/Phenotype

[+ Disease Terms](#)

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[+ Research Areas By Phenotype](#)

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[+ Mammalian Phenotype Terms by Genotype](#)

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[+ References](#)

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## ⊖ Technical Support

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

### Genotyping Protocols

Standard PCR:[\(Prnp-TBP\\*\)105Xjl](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

When maintaining a live colony on this F1 hybrid background, hemizygous mice are bred with B6CBAF1/J mice (Stock No. [100011](#)). The Donating Investigator reports that the strain did not thrive well enough to maintain on the FVB background and bred male animals to female B6CBAF1/J mice. These TBP-105Q transgenic mice have a reduced lifespan of 5 months and begin to die as early as 9 weeks of age. Onset of progressive locomotor impairment is 6 weeks of age. The Donating Investigator has not attempted to make the strain homozygous.

[Additional Breeding and Husbandry Support](#)

### Citation

When using the B6CBA-Tg(Prnp-TBP\*)105Xjl/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #008075 in your Materials and Methods section.

### Animal Health Reports

[Facility Barrier Level Descriptions](#)

*Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)*

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## ⊖ Pricing & Availability



Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

## Domestic International

Pricing effective for USA, Canada and Mexico shipping destinations

### CRYORECOVERY - DOMESTIC NOT-FOR-PROFIT & ACADEMIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Hemizygous or Non carrier for Tg(Prnp-TBP*)105Xjl/	\$2,854.50

### RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6CBA-Tg(Prnp-TBP*)105Xjl/J Frozen Embryo	\$2595.00
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## 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.

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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.

## Terms Of Use

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Use of MICE only available to non-profit entities.

## LICENSING INFORMATION

Phone: 207-288-6470

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

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All

By Allele

By Gene

By Collection



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