



B 6 . C g - T g (P n k d * A 7 V * A 9 V , - D s R e d) 7 0 4

Stock No: 022146

 Congenic, Transgenic



CRYO RECOVERY

P L A C E O R D E R

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

Overview

This transgenic strain, mut Tg Pknd line 704, expresses an estimated 2 copies of the long isoform of the paroxysmal nonkinesigenic dyskinesia (*Pnkd*) gene mutated to include the A7V and A9V substitutions found in human PNKD patients. Following i.p. administration of ethanol or caffeine, mice exhibit nigrostriatal neurotransmission deficits and dyskinesia.

Donating Investigator

Louis Ptacek, University of California, San Francisco

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

Tg(*Pnkd**A7V*A9V,-DsRed)704Ljp

Allele Type

Transgenic (Inserted expressed sequence)

VIEW GENETICS

RESEARCH APPLICATIONS

Metabolism Research

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

The autosomal dominant episodic movement disorder, paroxysmal nonkinesigenic dyskinesia (PKND), is associated with two valine to alanine substitutions in the uncharacterized human gene, *PNKD*. This transgenic strain, mut Tg (line 704), expresses the long

isoform of the *Pnkd* gene and the A7V and A9V substitutions. The long isoform of PNKD is expressed only in the central nervous system. In humans, *PNKD* movement disorder is observed following stress, caffeine or alcohol intake. Mice carrying the transgene are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. Following i.p. administration of ethanol or caffeine, transgenic mice exhibit nigrostriatal neurotransmission deficits, reduced extracellular dopamine levels in the striatum, an increased percentage of striatal dopamine release, and dyskinesia characterized by severe axial stiffness and abnormal limb movements. Non-induced mice exhibit lower glutathione levels in the frontal cortex. This mutant mouse strain may be useful in studies of autosomal dominant episodic movement disorder (PKND) and cellular redox regulation. No discernible phenotypic differences have been observed between transgenic line 671 (see Stock No. [018410](#)) which carries an estimated single copy of the transgene and line 704 which carries approximately 2 copies. A DsRed insertion is believed to be non-functional.

+ Development

+ Expression Data

+ Control Suggestions

+ Selected References

- Genetics

+ Tg(Pnkd*A7V*A9V,-DsRed)704Ljp

- Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

- Technical Support

C H A T O  F L I N E

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: [Tg\(Pnkd,-DsRed\)445Ljp](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

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

[Additional Breeding and Husbandry Support](#)

Citation

When using the B6.Cg-Tg(Pnkd*A7V*A9V,-DsRed)704Ljp/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #022146 in your Materials and Methods section.

[Facility Barrier Level Descriptions](#)

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

➔ Pricing & Availability



Cryo Recovery

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 Pricing

| SERVICE | GENOTYPE | PRICE |
|---------------|---|------------|
| Cryo Recovery | Hemizygous or non carrier for Tg(Pnkd*A7V*A9V,-DsRed)704Ljp | \$2,854.50 |

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a [Dedicated Supply](#) for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

| | | |
|---------------------|---|-----------|
| Frozen Mouse Embryo | B6.Cg-Tg(Pnkd*A7V*A9V -DsRed)704Ljp/J Frozen Embryo | \$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.

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