

B6.Cg-Pabpn1^{tm1.1Gpv1}/J

Stock No: **029236** | Pabpn1 conditional knock-in

 Congenic, Targeted Mutation

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

PLACE ORDER

[Email](#) [Download PDF](#) [Help](#)

prevented by an upstream floxed sequence containing a WT mouse *Pabpn1* gene and an EGFP sequence. Cre Recombinase excision of the floxed region results in the expression of Pabpn1^{A17}, associated with the onset of Oculopharyngeal muscular dystrophy (OPMD).

Donating Investigator

Grace Pavlath, Emory University School of Medicine

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

Pabpn1^{tm1.1Gpv1}

Allele Type

Targeted (Conditional ready (e.g. floxed), Reporter, Inserted expressed sequence)

Gene Symbol

Pabpn1

Gene Name

poly(A) binding protein, nuclear 1

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

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

Pabpn1 conditional knock-in mice possess *loxP* sites flanking a WT mouse poly(A) binding protein, nuclear 1 (*Pabpn1*) cDNA, an internal ribosomal entry site (IRES), and an enhanced green fluorescent protein (EGFP) sequence, preventing expression of a downstream 17 alanine-expanded endogenous *Pabpn1* gene. PABPN1 is a ubiquitously expressed RNA binding protein that is most well characterized as a regulator of polyadenosine (poly[A]) tail length and alternative polyadenylation (APA), as well as a regulator of expression of antisense RNAs associated with gene promoters. A dominant expansion of ten amino terminal alanine residues to 11-18 alanines in PABPN1 is associated with the onset of Oculopharyngeal muscular dystrophy (OPMD). This is a late onset disease that causes ptosis, dysphagia, and loss of mobility due to progressive weakness of eyelid, pharyngeal, and proximal limb muscles. Patients are affected by loss of nutrition and aspiration pneumonia. When these mutant mice are bred to mice that express Cre recombinase, resulting offspring will have the floxed sequence removed, allowing for expression of *Pabpn1*^{A17} in *cre*-expressing tissues. Mice that are homozygous for this allele are viable and fertile.

When bred to B6.FVB-Tg(*Ela-cre*)C5379Lmgd/J (Stock No. [003724](#)) mice, with early embryonic Cre Recombinase expression, resulting *Pabpn1*^{A17} mice exhibit mild myopathic phenotype in adult and aged animals. They have shorter poly(A) tails, modest changes in poly(A) signal (PAS) usage, and evidence of mitochondrial damage as noted by increased mitochondrial genome copy number. They also display hind limb claspings starting at nine months of age, and they have smaller hind limb muscles.

+ Development

+ Expression Data

+ Control Suggestions

– Genetics

+ *Pabpn1*^{tm1.1Gpv}

⊖ Disease/Phenotype

+ [Disease Terms](#)

+ [Research Areas By Phenotype](#)

+ [Mammalian Phenotype Terms by Genotype](#)

+ [References](#)

⊖ 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

Probe:[Fluorescent Proteins \(Generic GFP\)](#)

QPCR:[Pabpn1-qPCR](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, mice heterozygous for the floxed allele may be bred to wildtype littermates from the colony, or to C57BL/6J inbred mice (Stock No. [000664](#)). The donating investigator has not attempted to make this strain homozygous.

[Additional Breeding and Husbandry Support](#)

Mating System

Wild-type x Heterozygote

Heterozygote x Wild-type

Citation

When using the Pabpn1 conditional knock-in mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #029236 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](#)

🔍 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/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Heterozygous or wildtype for Pabpn1<tm1.1Gpv>	\$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6.Cg-Pabpn1<tm1.1Gpv>/J	\$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.

🔍 Terms Of Use

TERMS OF USE

[General Terms and Conditions](#)

Q U E S T I O N S A B O U T T E R M S O F U S E

LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

☰ Related Strains

All

By Allele

By Gene

By Collection



DO YOU NEED BALB/c MICE?

Rely on JAX to provide the models you need, when you need them.

[LEARN MORE](#)



CONTACT



DONATE



SUBSCRIBE

JAX HOME CAREERS LEGAL INFORMATION

RESEARCH CENTERS MOUSE GENOME INFORMATICS


MOUSE PHENOME DATABASE

Leading the search for

TOMORROW'S CURES



©2021 THE JACKSON LABORATORY

Choose other country or region 

^
E E E D B

Did you find what you were looking for?

Yes No