

**B6.129S1-Cdkn2a<sup>tm4Cjs</sup> /J**

Stock No: **023323** | *Arf<sup>FL/+</sup>*

 Congenic, Targeted Mutation

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

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## Donating Investigator

Charles J. Sherr, St. Jude Children's Research Hospital

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## GENETIC OVERVIEW

Genetic Background

Generation

*Cdkn2a<sup>tm4Cjs</sup>*

**Alele Type**

Targeted (Conditional ready (e.g. floxed), No functional change)

**Gene Symbol**

*Cdkn2a*

**Gene Name**

cyclin dependent kinase inhibitor 2A

VIEW GENETICS

## RESEARCH APPLICATIONS

Research Tools

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

The alternate reading frame of the *Cdkn2a* (cyclin-dependent kinase inhibitor-2A) locus encoding the Arf tumor suppressor, is expressed transiently during mouse male germ cell and eye development. Its inactivation compromises spermatogenesis as mice age and leads to aberrant postnatal proliferation of cells in the vitreous of the eye, resulting in blindness. The gene is frequently deleted or epigenetically silenced in a wide variety of tumors. Mice lacking Arf spontaneously develop tumors later in life.

The first coding exon (exon-1 $\beta$ ) of the mouse Arf gene is flanked by loxP sites in this conditional mutant strain. Floxed homozygotes are viable and fertile, appear phenotypically normal, and are not prone to cancer development. Cre-mediated excision of the floxed segment results in directed knockouts of the Arf gene but leave the linked *Ink4a* (*Cdkn2a*) gene intact. Infection of cultured embryonic fibroblast cells or pre-B cells with cre-expressing retroviruses can produce immortalized Arf-null cell lines.

### Development

### Control Suggestions

### Selected References

## Genetics

### *Cdkn2a*<sup>tm4Cjs</sup>

## Disease/Phenotype

### Disease Terms

### Research Areas By Phenotype

+ Mammalian Phenotype Terms by Genotype

+ References

## - Technical Support

### CONTACT TECHNICAL SUPPORT

#### Genotyping Protocols

Standard PCR:[Cdkn2a](#)

[Genotyping resources and troubleshooting](#)

#### Breeding Considerations

Homozygous and heterozygous floxed mice are viable and fertile.

[Additional Breeding and Husbandry Support](#)

#### Mating System

Homozygote x Homozygote

#### Citation

When using the *Arr<sup>FL/+</sup>* mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #023323 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
<a href="#">Cryo Recovery</a>	Heterozygous for <i>Cdkn2a</i> <tm4Cjs>	\$2,854.50

## RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

B6.129S1-Cdkn2a<tm4Cjs>/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

### ADDITIONAL USE RESTRICTIONS APPLY

[Use of MICE by companies or for-profit entities requires a license prior to shipping.](#)

### LICENSING INFORMATION

Phone: 207-288-6470

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

## Related Strains

All

By Allele

By Gene

By Collection



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