

B6.129P2-H2-K1^{tm1Bpe} H2-D1^{tm1Bpe} /DcrJ

Stock No: **019995** | double H2K^b D^b knockout

 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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immunity, cytotoxic T cell response and cerebellar synaptic plasticity.

Donating Investigator

Dr. Derry Roopenian, The Jackson Laboratory

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

GENETIC OVERVIEW

Genetic Background **Generation**

H2-K1^{tm1Bpe}

Allele Type	Gene Symbol	Gene Name
Targeted (Null/Knockout)	<i>H2-K1</i>	histocompatibility 2, K1, K region

H2-D1^{tm1Bpe}

Allele Type	Gene Symbol	Gene Name
Targeted (Null/Knockout)	<i>H2-D1</i>	histocompatibility 2, D region locus 1

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

RESEARCH APPLICATIONS

- Immunology, Inflammation and Autoimmunity Research
- Research Tools
- Neurobiology Research

[VIEW ALL RESEARCH APPLICATIONS](#)

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

[VIEW PRICE LIST](#)

Details

Detailed Description

These H-2 $K^b D^b$ knock-out mice carry knock-out alleles of the MHC class I genes (K^b null and D^b null) and lack CD8+ TCRalpha/beta T-cells, but have more CD4-positive, alpha beta T cells, and fewer single positive CD8 peripheral T-cells. Mice homozygous for both alleles exhibit diminished innate immune response, have decreased susceptibility to Lymphocytic Choriomeningitis Virus infection, and have an increased cytotoxic T cell response to *Listeria monocytogenes* infection. These mutant mice exhibit enhanced motor learning, with lowered threshold for induction of long-term depression at parallel fiber- Purkinje cell synapses.

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. This is the case for the strain above. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.

Development

Control Suggestions

Selected References

Genetics

[+ H2-K1^{tm1Bpe}](#)

[+ H2-D1^{tm1Bpe}](#)

⊖ 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

Standard PCR:[H2-D1 Alternate3](#)

Standard PCR:[H2-K1alternate2](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, these mice can be bred as double homozygotes.

[Additional Breeding and Husbandry Support](#)

Citation

When using the double H2K^bD^b knockout mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #019995 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



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Domestic International

Pricing effective for USA, Canada and Mexico shipping destinations

Cryorecovery - Domestic Pricing

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Heterzygous for H2-K1<tm1Bpe> and Heterozygous for H2-D1<tm1Bpe>	\$2,854.50

Related Products and Services

Frozen Mouse Embryo	B6.129P2-H2-K1<tm1Bpe> H2-D1<tm1Bpe>/DcrJ Frozen Embryo	\$2595.00
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