

B6.Cg-Apoe^{em2(APOE*)Adiuj}/J

Stock No: **029018** | APOE3 KI

 Congenic, Endonuclease-Mediated Mutation

Live mice available in varying quantities. Ask Customer Service for details.

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in allele and express the human APOE isoform E3. This CRISPR/Cas9-generated model is designed to express the Alzheimer's disease neutral variant APOE3 in place of the mouse gene.

Donating Investigator

Mike Sasner, The Jackson Laboratory

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GENETIC OVERVIEW

Genetic Background

Generation

?+pN3F6
(2021-03-10 00:00:00)

Apoe^{em2(APOE)Adiuj}*

Allele Type

Endonuclease-mediated
(Inserted expressed
sequence, Humanized
sequence)

Gene Symbol

Apoe

Gene Name

apolipoprotein E

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$255.00 Domestic price for female 4-week

333.51 Domestic price for breeder pair

V I E W P R I C E L I S T

Details

Detailed Description

The targeted *Apoe* gene encodes apolipoprotein E, which is important in lipoprotein metabolism and cardiovascular disease as well as Alzheimer's disease, immunoregulation and cognition. CRISPR/Cas9 genome editing was used to introduce a C to T nucleotide substitution in amino acid R130C into the human *APOE* sequence of the *Apoe*^{tm1.1(APOE*4)Adiuj} allele. The resulting APOE3 KI mice express APOE isoform 3 from the endogenous *Apoe* locus. The APOE3 isoform is found in approximately 79% of the population.

Homozygous mice are viable and fertile. If additional characterization of these APOE3 KI mice is performed, we may modify the strain description accordingly.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Apoe^{em2(APOE*)Adiuj}

⊖ 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

End Point Analysis:[Plcg2 P522R-EP](#)

Sanger sequencing:[Apoe-Alternate 1](#)

Standard PCR:[Apoe](#)

Standard PCR:[Apoe](#)

Probe:[Apoe 5' CT Alternate1](#)

Probe:[Apoe-Probe](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

Both heterozygous and homozygous mice are viable and fertile.

When maintaining a live colony, heterozygous mice may be bred to wildtype mice from the colony or to C57BL/6J inbred mice (Stock No. [000664](#)).

Alternatively, homozygous mice may be bred together.

[Additional Breeding and Husbandry Support](#)

Mating System

Heterozygote x Wild-type

Wild-type x Heterozygote

Citation

When using the APOE3 KI mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #029018 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

 [AX18 \(Maximum\)](#)

➔ Pricing & Availability



Live mice available in varying quantities. Ask Customer Service for details.

Available

Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE			
AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
4 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
5 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
5 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
6 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
6 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
7 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
7 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
8 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
8 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
9 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
9 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
10 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
10 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51

	SEX	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
11 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
11 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
12 weeks	Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
	Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}	\$255.00
12 weeks	Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51
	Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}	\$78.51

BREEDER PAIR			
SEX	GENOTYPE		PRICE
Female	Heterozygous for Apoe ^{em2(APOE*)Adiuj}		\$333.51
Male	Wild-type for Apoe ^{em2(APOE*)Adiuj}		
Female	Wild-type for Apoe ^{em2(APOE*)Adiuj}		\$333.51
Male	Heterozygous for Apoe ^{em2(APOE*)Adiuj}		

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	B6.Cg-Apoe ^{em2(APOE*)Adiuj} /J	\$2595.00

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