



B6.Cg^{em2(APOE*)Aduj}/J

Stock No: 029018 | APOE3 KI

Congenic, Endonuclease-Mediated Mutation



AVAILABLE

PLACE ORDER

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

Overview



MODEL-AD

Model Organism Development & Evaluation for Late-Onset Alzheimer's Disease

Also Known As: APOE3 KI , APOE*3 KI

These APOE*3 KI CRISPR/Cas9 generated mice carry a R130C point mutation in the human *APOE* sequence of an existing humanized ApoE knock-in allele and express the human APOE isoform E3.

Donating Investigator

Mike Sasner, The Jackson Laboratory

[READ MORE +](#)

GENETIC OVERVIEW

Genetic Background

Generation

?+pN2

(2018-12-03 00:00:00)

Apoe^{em2(APOE*)}*Adiuj*

Allele Type

Gene Symbol

Gene Name

Endonuclease-mediated
(Inserted expressed
sequence, Humanized
sequence)

Apoe

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

[VIEW PRICE LIST](#)

[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 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 APOE*3 KI mice express APOE isoform 3, from the endogenous *ApoE* locus. The APOE 3 isoform is found in approximately 79% of the population.

As the mice are characterized, we will modify the strain description and add phenotype data. Homozygotes are viable and fertile.

+ Development

+ Expression Data

+ Control Suggestions

- Genetics

+ *ApoE*^{em2(APOE*)Adiuj}

- Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

- Technical Support

T E C H N I C A L S P P O R T C H A T

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^{tm1.1\(APOE*4\)Msasn-E4/E3/E2}](#)

Standard PCR: [ApoE^{tm1.1\(APOE*4\)Adiuj}](#)

Probe: [ApoE^{em#\(APOE*4\)} 5 prime CT](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, APOE*3 KI heterozygotes may be bred together, to C57BL/6J (Stock# [000664](#)), or wildtype littermates.

Homozygotes are viable and fertile.

[Additional Breeding and Husbandry Support](#)

Mating System

Heterozygote x Wild-type

Wild-type x Heterozygote

Citation

When using the APOE3-K1 mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #029018 in your Materials and Methods section.

 [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	SEX	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
	Male	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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All

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By Gene

By Collection

All Related Strains



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B6.129P2-Apoetm1Unc/J

Stock No: 002052 | ApoE KO

Related By: [ApoE](#)



AVAILABLE

B6(SJL)-Apoetm1.1(APOE*4)Adiuj Trem..

Stock No: 028709 | APOE4/Trem2*R47H

Related By: [APOE](#), [ApoE](#), [ADPMC](#)



AVAILABLE

B6(SJL)-Apoetm1.1(APOE*4)Adiuj/J

Stock No: 027894 | APOE4 KI

Related By: [APOE](#), [ApoE](#), [ADPMC](#)



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