B6.Cg-Tg(GFAP-APOE_i2)14Hol Apoe^tmUnc^J

**Stock No:** 004632 | GFAP-apoE2 line14

- Green: Congenic, Targeted Mutation, Transgenic

**CRYO RECOVERY**

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

Also Known As: Tg(GFAP-APOE*2)14Hol, B6.Cg-Tg(GFAP-APOE*2)14Hol Apoe<sup>tm1Unc</sup>/J, GFAP-apoE2 line14

These GFAP-apoE2 line14 mice express a transgene containing human APOE2 and follows the endogenous mouse APOE and GFAP expression patterns in the brain.

Donating Investigator
Dr. David M. Holtzman, Washington University

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td>Tg(GFAP-APOE_i2)14Hol</td>
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Allele Type
Transgenic (Inserted expressed sequence, Humanized sequence)

Apo<sup>tm1Unc</sup>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Targeted (Null/Knockout)</td>
<td>Apoe</td>
<td>apolipoprotein E</td>
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VIEW GENETICS

RESEARCH APPLICATIONS
Cardiovascular Research
Mouse/Human Gene Homologs
Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery
Details

Detailed Description
These transgenic mice express the human apolipoprotein E2 isoform (APOE2) under the direction of the human glial fibrillary acidic protein (GFAP) promoter and do not express endogenous mouse apolipoprotein E (APOE). The transgenic isoform expression pattern follows the endogenous mouse APOE and GFAP expression patterns in the brain. Human APOE2 is immunodetectable in glia and neuropil in developing and adult mutant mice. Cultured astrocytes from transgenic mice secrete APOE2 in lipoproteins that are similar in size to high-density (HDL) plasma lipoproteins. Detergent-soluble APOE2 protein levels in hemizygous mice forebrain tissue and in adult human cortex tissue are similar. Mice that are hemizygous or homozygous for the transgenic insert and homozygous for the targeted allele are viable, normal in size and do not display any gross physical or behavioral abnormalities. This mutant mouse strain represents a model that may be useful in studies examining the function of APOE2 in the central nervous system and how APOE2 may contribute to the pathology of Alzheimer's disease.

According to the donating investigator, mice that are hemizygous for the transgene and homozygous for the null mutation show dyslipidemia similar to non-transgenic Apoe-null mutant mice (B6.129P2-Apoe/J - Stock # 002052) in peripheral blood. Although some transgene-derived APOE protein does make it to the periphery, it is not enough to lower peripheral cholesterol significantly.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(GFAP-APOE_I2)14Hol

Apoelm7Unc

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols
Standard PCR: Tg(GFAP-APOE)  
High Resolution Melting: Apoe<sup>tm1Unc</sup>  
Standard PCR: Apoe<sup>tm1Unc</sup>  
QPCR: Tg(GFAP-APOE)  
Genotyping resources and troubleshooting

Breeding Considerations
The resulting transgenic founder animals were bred to B6.129P2-Apoel<sup>tm1Unc</sup> (Stock #: 2052) for ten generations.  
Additional Breeding and Husbandry Support

Citation
When using the Ekeri<sup>tm1Unc</sup> Line14 mouse strain in a publication, please cite the originating article(s) and include JAX stock #004632 in your Materials and Methods section.  
Facility Barrier Level Descriptions  
Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

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

<table>
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<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>Cryo Recovery</td>
<td>Hemizygous for Tg(GFAP-APOE&lt;sub&gt;i2&lt;/sub&gt;)14Hol and heterozygous for Apoe&lt;sup&gt;tm1Unc&lt;/sup&gt;</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. **Please check genotypes which will be recovered.** While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. **Animals are typically ready to ship in 11-14 weeks.** If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.  
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Related Strains

- All
- By Allele
- By Gene
- By Collection

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TOMORROW'S CURES

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