Overview

Also Known As: PrP-mAbca1

These transgenic mice, expressing the mouse Abca1 (ATP-binding cassette, sub-family A (ABC1), member 1) gene under the control of the mouse prion protein promoter exhibit an increase in expression of ABCA1 in the cortex and reduction of apoE levels in the hippocampus and cerebrospinal fluid. These mice may be useful in studies of amyloid deposition in the brain and Alzheimer's disease.
Donating Investigator
Dr. David M. Holtzman, Washington University

GENETIC OVERVIEW
Genetic Background      Generation

Tg(Prnp-Abca1)EHol
Allele Type
Transgenic (Inserted expressed sequence)

RESEARCH APPLICATIONS
Neurobiology Research
Reproductive Biology Research

BASE PRICE
Starting at:

$2,854.50 Domestic price Cryo Recovery

Details

Detailed Description
These transgenic mice express the mouse Abca1 (ATP-binding cassette, sub-family A (ABC1), member 1) gene under the control of the mouse Prnp (prion protein) promoter.

These founder line E mice have a 6-fold increase in expression of ABCA1 in the cortex over wild-type levels. Tran gene expression is high in total brain tissue, kidney, testis and muscle as detected by Western blot analysis. Transgenic mice exhibit reduced apoE levels: 40% of wild-type levels in the hippocampus, approximately half of wild-type levels in cerebrospinal fluid (CSF). The apoE protein that is overexpressed has altered biochemical properties and is not as soluble as that found in controls. Lipoprotein particles from the CSF that contain apoE protein are larger in size than wild-type, indicating that the transgenic apoE particles are more lipiddated.

Male transgenic mice have atrophied testes, defective spermatogenesis and are infertile. The strain can be maintained by mating
hemizygous females to wild-type males.

These mice may be useful in studies of the underlying mechanism of amyloid deposition in the brain and Alzheimer's disease.

- Development
- Expression Data
- Control Suggestions
- Selected References

- Genetics
  - Tg(Prnp-Abca1)EHol

- Disease/Phenotype
  - Disease Terms
  - Research Areas By Genotype
  - Mammalian Phenotype Terms by Genotype
  - References

- Technical Support

Genotyping Protocols
MELT: Tg(Prnp-Abca1)
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, these transgenic mice can be bred by mating female hemizygote to a wildtype male. Male transgenic mice are sterile.
Additional Breeding and Husbandry Support

Citation
When using the PrP-Abca1 mouse strain in a publication, please cite the originating article(s) and include JAX stock #008596 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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<th>Domestic</th>
<th>International</th>
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<tr>
<th>Cryorecovery - Domestic Pricing</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>Cryo Recovery</td>
<td>Hemizygous females and wildtype males for Tg(Prnp-Abca1)EHol</td>
<td>$2,854.50</td>
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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.

Cryorecovery to establish a Dedicated Supply for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

| Frozen Mouse Embryo | $2,595.00 per straw or vial |

Payment Terms and Conditions

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