FVB-Tg(C3-1-TAg)cJeg/JegJ

Stock No: 013591 | C3(1)-TAg, C3(1)/Tag

Coisogenic, Transgenic

PLACE ORDER

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

Overview

Also Known As: C3(1)-TAg, C3(1)/Tag

Stock No. 013591: The C3(1)-TAg transgenic strain is a model for the study of multistage oncogenesis in the prostate and mammary glands.

Of note, a subline was identified with transgene rearrangement/deletion to only one copy (or a partial copy) in the original chromosome 6 locus - resulting in retained tolerance to SV40 TAg but no spontaneous cancer phenotype. The new subline, called C3(1)/TAg-REAR, is available as Stock No. 030386.

Donating Investigator

Jeffrey E Green, National Cancer Institute, National Institutes of Health (NIH/NCI)

Cryopreservation Cryopreservation, TJL
GENETIC OVERVIEW

Tg(C3-1-TAg)cJeg

Allele Type
Transgenic (Inserted expressed sequence)

RESEARCH APPLICATIONS
Research Tools
Cancer Research
Reproductive Biology Research

BASE PRICE
Starting at:
$255.00 Domestic price for female
333.51 Domestic price for breeder pair

Details

Detailed Description

The C3(1)/TAg founder line C originally contained six transgene copies at a single locus in the telomeric portion of chromosome 6 (which contains the Ki-ras proto-oncogene) - resulting in multistage oncogenesis in prostate and mammary gland. The published details are described in detail below.

Male hemizygous transgenic mice develop prostatic hyperplasia in early life that progresses to adenoma or adenocarcinoma in about half of the animals which survive longer 7 months of age. Some transgenic male hemizygotes develop adenocarcinomas of the urethral/perirethral and bulbourethral glands (10-20% of hemizygous males) and submandibular gland (10% of hemizygous males 8 months of age). In female transgenic mice, the transgene is expressed primarily in the distal mammary ductal epithelium and terminal ductal lobular unit. Female hemizygous animals generally develop mammary intraepithelial neoplasia with
similarities to DCIS by 3 months of age with subsequent development of mammary adenocarcinoma by 6 months of age in 100% of the animals. About 10-15% of hemizygous female mice develop lung metastases. Direct invasion of adjacent lymph nodes, skeletal muscle, salivary glands and tissues as well as mammary tumor metastases in liver, adrenal and heart have also been observed. Bone, brain and regional lymph node metastases have not been observed. Tumors of the sweat glands have been observed in both male and female transgenic animals. The phenotype for this transgene has been most extensively studied in the PVB/N background. While homozygotes are viable and fertile, pups born to homozygous mothers need foster mothers because of lactation difficulties.

Of note, in 2016, 6-7 week old mice from this Jackson Laboratory colony were observed to display gait abnormalities. While the expected phenotype of this transgenic line might conceivably lead to gait abnormalities, the expected pathology in the eccrine sweat glands of the foot pads seems not to be the case. Histologic analysis indicates that these mice have significant changes in the cartilage of the stifle and hip joints, with variable pathology that is sometimes severe. Cartilage is severely thickened and hyperplastic, with multifocal acellular regions and multifocal cartilage necrosis and loss. Further, routine screening of the donating investigator’s C3(1)/TAg founder line C colony identified female transgenic mice that retained tolerance to SV40 TAg but did not develop the expected phenotype (mammary tumors) - a result of transgene rearrangement/deletion to only one copy (or a partial copy) in the original chromosome 6 locus. The newer subtype, called C3(1)/TAg-REAR, is available as Stock No. 030386.
Genotyping Protocols
MELT: Generic SV40 TAg 1
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, transgene carrier mice may be bred with wildtype mice from the colony or with FVB/NJ (Stock No. 001800) mice. While homozygotes are viable and fertile, pups born to homozygous mothers need foster mothers because of lactation difficulties. Female hemizygous animals generally develop mammary intraepithelial neoplasia with similarities to DCIS by 3 months of age with subsequent development of mammary adenocarcinoma by 6 months of age in 100% of the animals. Male hemizygous transgenic mice develop prostatic hyperplasia in early life that progresses to adenoma or adenocarcinoma in about half of the animals which survive longer 7 months of age.

Additional Breeding and Husbandry Support

Mating System
Noncarrier x Hemizygote

Citation
When using the C57BL/6J-Tg(C3(1)-Tag1)1Jax mouse strain in a publication, please cite the originating article(s) and include JAX stock #013591 in your Materials and Methods section.

Facility Barrier Level Descriptions

AX12 (Maximum)

Pricing & Availability

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

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Hemizygous for Tg(C3-1-TAg)cJeg</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Hemizygous for Tg(C3-1-TAg)cJeg</td>
<td>$255.00</td>
</tr>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Noncarrier</td>
<td>$78.51</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Noncarrier</td>
<td>$78.51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breeder Pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Products and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
</tr>
</tbody>
</table>
Terms of Use

General Terms and Conditions

QUESTIONs ABOUT TERMS OF USE

Additional Use Restrictions Apply

Notice to customers in Canada.

Licensing Information
Phone: 207-288-6470
Email: TechTran@jax.org

JAX® Mice, Products & Services Conditions of Use

“MICE” means mouse strains, their progeny derived by inbreeding or crossbreeding, unmodified derivatives from mouse strains or their progeny supplied by The Jackson Laboratory (“JACKSON”). “PRODUCT(S)” means biological materials supplied by JACKSON, and their derivatives. “SERVICES” means projects conducted by JACKSON for other parties that may include but are not limited to the use of MICE or PRODUCTS. “RECIPIENT” means each recipient of MICE, PRODUCTS, or SERVICES provided by JACKSON including each institution, its employees and other researchers under its control. MICE or PRODUCTS shall not be: (i) used for any purpose other than internal research, (ii) sold or otherwise provided to any third party for any use, or (iii) provided to any agent or other third party to provide breeding or other services. Acceptance of MICE, PRODUCTS or SERVICES from JACKSON shall be deemed as agreement by RECIPIENT to these conditions, and departure from these conditions requires JACKSON’s prior written authorization.

No Warranty

MICE, PRODUCTS AND SERVICES ARE PROVIDED “AS IS”. JACKSON EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO MICE, PRODUCTS OR SERVICES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF NON-INFRINGEMENT OF ANY PATENT, TRADEMARK, OR OTHER INTELLECTUAL PROPERTY RIGHTS.

Credit for PRODUCTS or SERVICES

In case of dissatisfaction for a valid reason and claimed in writing by a purchaser within ninety (90) days of receipt of, PRODUCTS or SERVICES, JACKSON will, at its option, provide credit or replacement for the PRODUCT received or the SERVICES provided; JACKSON makes no other representations and this shall be the exclusive remedy of the purchaser. Please note specific policy for live mice.

Animal Care and Use for SERVICES

Consistent with the requirement for a written understanding regarding animal care and use, the JACKSON Animal Care and Use Committee will review the animal care and use protocol(s) associated with any SERVICES to be performed at JACKSON, and JACKSON shall have ultimate responsibility and authority for the care of animals while on site or in JACKSON custody.

No Liability

In no event shall JACKSON, its trustees, directors, officers, employees, and affiliates be liable for any causes of action or damages, including any direct, indirect, special, or consequential damages, arising out of the provision of MICE, PRODUCTS, or SERVICES, including economic damage or injury to property and lost profits, and including any damage arising from acts or negligence on the
part of JACKSON, its agents or employees. Unless prohibited by law, in purchasing or receiving MICE, PRODUCTS, or SERVICES from
JACKSON, purchaser or recipient, or any party claiming by or through them, expressly releases and discharges JACKSON from all
such causes of action or damages, and further agrees to defend and indemnify JACKSON from any costs or damages arising out of
any third party claims.
MICE, PRODUCTS or SERVICES are to be used in a safe manner and in accordance with all applicable governmental rules and
regulations.
The foregoing represents the General Terms and Conditions applicable to JACKSON’s MICE, PRODUCTS or SERVICES. In addition,
special terms and conditions of sale of certain MICE, PRODUCTS, or SERVICES may be set forth separately in JACKSON web pages,
catalogs, price lists, contracts, and/or other documents, and these special terms and conditions shall also govern the sale of these
MICE, PRODUCTS and SERVICES by JACKSON, and by its licensees and distributors.
Acceptance of delivery of MICE, PRODUCTS or SERVICES shall be deemed agreement to these terms and conditions. No purchase
order or other document transmitted by purchaser or recipient that may modify the terms and conditions hereof, shall be in any way
binding on JACKSON, and instead the terms and conditions set forth herein, including any special terms and conditions set forth
separately, shall govern the sale of MICE, PRODUCTS or SERVICES by JACKSON.

Related Strains

All

By Allele

By Gene

By Collection

All Related Strains

Do You Need Pep Boy Mice?
Rely on JAX to provide the models you need, when you need them.

CONTACT
Leading the search for
TOMORROW'S CURES