BKS.Cg-Dock7<sup>m+</sup> Lepr<sup>db</sup> Tg(SLC2A4)HJdm/Pfzr.J

Stock No: 031579 | hGLUT4

Spontaneous Mutation, Transgenic

AVAILABLE FOR PRE-ORDER

PRE-ORDER NOW

Estimated to begin distribution on Apr 22, 2019
Also Known As: hGLUT4
The hGLUT4 transgenic construct contains the human GLUT4 gene and is useful when studying glucose homeostasis.

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>?+pN1</td>
</tr>
<tr>
<td></td>
<td>(2018-09-07 00:00:00)</td>
</tr>
</tbody>
</table>

**Dock7<sup>m</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Dock7</td>
<td>dedicator of cytokinesis 7</td>
</tr>
</tbody>
</table>

**Lepr<sup>db</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Lepr</td>
<td>leptin receptor</td>
</tr>
</tbody>
</table>

**Tg(SLC2A4)HJdm**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgenic (Inserted expressed sequence, Humanized sequence)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESEARCH APPLICATIONS
Reproductive Biology Research
Mouse/Human Gene Homologs
Diabetes and Obesity Research
Endocrine Deficiency Research
Immunology, Inflammation and Autoimmunity Research
Internal/Organ Research
Dermatology Research
Metabolism Research

BASE PRICE
Starting at:

- $255.00 Domestic price for female
- $110.00 Domestic price for breeder pair
hGLUT4 mice contain the human solute carrier family 2 (facilitated glucose transporter), member 4 (SLC2A4) gene with an SV40 polyadenylation sequence. Also known as the Insulin-Responsive Glucose Transporter Type 4 (GLUT4), this transporter is rapidly translocated from intracellular storage sites to the muscle cell surface, allowing uptake of glucose. Mutations in the human SLC2A4 gene have been linked to noninsulin-dependent diabetes mellitus. hGLUT4 db/db mice exhibit elevated plasma membrane associated GLUT4 protein in the basal state, which increases further after an insulin/glucose injection. They also show a reduction of both fasted and fed plasma glucose levels (to 50 and 360 mg/dl, respectively) compared to non-transgenic littermates.
Genotyping Protocols
MELT: Tg(SLC2A4)HJdm
End Point Analysis: Dock7m-Probe
End Point Analysis: Leprdb
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, hemizygous mice may be bred to wildtype mice from the colony or to BKS.Cg-Dock7m/+/Lepr/db/J (BKS db) mice (Stock No. 000642).
Additional Breeding and Husbandry Support

Mating System
het, het, ncar x het, het, hemi
and
het, het, hemi x het, het, ncar

Citation
When using the Tg(SLC2A4)HJdm mouse strain in a publication, please cite the originating article(s) and include JAX stock #031579 in your Materials and Methods section.
Animal Health Reports
AX19 (Standard)

Pricing & Availability
Estimated to begin distribution on Apr 22, 2019

Live Mouse
<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>Heterozygous for Dock7m/+ Heterozygous for Leprdb Hemizygous for Tg(SLC2A4)HJdm</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Hemizygous for Tg(SLC2A4)HJdm</td>
<td>$255.00</td>
</tr>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Noncarrier</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Noncarrier</td>
<td>$255.00</td>
</tr>
</tbody>
</table>

Breeder Pair
<table>
<thead>
<tr>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Hemizygous for Tg(SLC2A4)HJdm</td>
<td>$510.00</td>
</tr>
<tr>
<td>Male</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Noncarrier</td>
<td>$510.00</td>
</tr>
<tr>
<td>Female</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Noncarrier</td>
<td>$510.00</td>
</tr>
<tr>
<td>Male</td>
<td>Heterozygous for Dock7m/+ Heterozygous for Leprdb Hemizygous for Tg(SLC2A4)HJdm</td>
<td>$510.00</td>
</tr>
</tbody>
</table>
Payment Terms and Conditions
Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

The Jackson Laboratory's Genotype Promise
The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain's phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project.

Terms Of Use
Terms of Use
General Terms and Conditions

Additional Use Restrictions Apply
Use of MICE by companies or for-profit entities requires a license prior to shipping.

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
ELLSWORTH FACILITY OFFICIALLY OPEN AND OPERATIONAL
Shipments have begun at our new facility, allowing increased access to JAX mouse models.