C.Cg-Cd19<sup>tm1(cre)Cgn</sup> Igh<sup>b</sup>/J

Stock No: 004126 | CD19Cre

Gene Symbol: Cd19
Gene Name: CD19 antigen
Marker Symbol: Igh
Marker Name: immunoglobulin heavy chain complex

Also Known As: CD19Cre
Homozygous mice are Cd19-deficient, whereas heterozygous mice are phenotypically normal and can be used for specific deletion of floxed targets in B-lymphocytes. Homozygous mice are severely impaired in their ability to respond to T-cell-dependent antigens and fail to form splenic germinal centers. A deficiency in the B-1 subset of B-lymphocytes is observed along with a concomitant reduction in serum IgM.

Donating Investigator
Robert Rickert, The Burnham Institute

RESEARCH APPLICATIONS
Research Tools
Hematological Research
Immunology, Inflammation and Autoimmunity Research
**Details**

**Detailed Description**

The Cd19 promoter specifically directs expression at the earliest stages and throughout B-lymphocyte development and differentiation. A Cre cassette is inserted into the Cd19 exon 2, functionally disrupting the gene. Homozygous mice are Cd19-deficient, whereas heterozygous mice are phenotypically normal and can be used for specific deletion of floxed targets in B-lymphocytes. Mice that are homozygous deficient for Cd19 are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. A deficiency in the B-1 subset of B-lymphocytes is observed along with a concomitant reduction in serum IgM. Homozygous mice are severely impaired in their ability to respond to T-cell-dependent antigens and fail to form splenic germinal centers.

Because the targeted mutation was generated on 129P2-derived embryonic stem cells, and the Cd19 locus is near the Tyr locus on chromosome 7, these Cd19-deficient mice may be albino (white coat color/pink eyes) or light-agouti coat color with dark eyes. View cre expression characterization.

**Development**

**Expression Data**

**Control Suggestions**

**Selected References**

**Genetics**

**Cd19^{tm1[aCre]}Cgn**

**Igh**

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Genotype**
Genotyping Protocols
Separated PCR: Cd19<sup>tm1(cre)Cgn</sup>
SEPARATED MELT: Cd19<sup>tm1(cre)Cgn</sup> Alternate 2
Genotyping resources and troubleshooting

Citation
When using the Cd19<sup>tm1(cre)Cgn</sup> mouse strain in a publication, please cite the originating article(s) and include JAX stock #004126 in your Materials and Methods section.

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.

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<th>SERVICE</th>
<th>GENOTYPE</th>
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<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Cd19&lt;sup&gt;tm1(cre)Cgn&lt;/sup&gt; Igh&lt;b&gt;</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.
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