CDR KO Mouse

Catalogue number: 154097
Sub-type: Mouse
Images:

Contributor

Inventor: Riccardo Dalla-Favera
Institute: The Trustees of Columbia University in the City of New York
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: CDR KO Mouse

Alternate name:

Class:
Conjugate:
Description: Deletion of chrosomal region 13q14 represents the most comon genetic abberation in B-Cell chronic lymphoma. Deletion of human chromosomal region 13q14 (mouse 14qC3) represents the most common genetic aberration in B-cell chronic lymphocytic leukaemia (CLL), a neoplasm of mature B lymphocytes. 13q14 deletions are commonly large and heterogeneous in size and affect multiple genes. Contained within the 13q14 region is the 0.69 megabase-large genomic region telomeric to the MDR called the common deleted region (CDR). The CDR encompasses the DLUE2 gene, miR-15a/16-1 cluster, DLEU1 gene, DLEU7 gene and RNASEH2B gene. Deletion of the CDR in this model organism recapitulates the full spectrum of CLL-associated lymphoproliferations in humans. Knockout of the CDR allele was induced in B-cells by crossing with CD19-Cre mice.
Purpose:
Parental cell:
Organism:
Tissue:
Model: Conditional KO
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:

Growth properties:
Production details: The 2 targeting vectors used to flank the CDR with loxP and frt sites were derivatives of pEmod227 containing either a phosphoglycerate kinase (PK)â?? neomycin-resistance (5â??tag) or a PK-hygromycin-resistance (3â??tag) poly(A) cassette, the herpes simplex virus thymidine kinase gene (both tags), a loxP and a frt site (both tags), a promoterless gene encoding enhanced green fluorescent protein (eGFP) and immediately preceding a triple simian virus 40 poly(A) site in 5â??tag, a PK promoter (3â??tag), and multiple unique restriction sites for cloning 14qC3 segments corresponding to the homology arms. Successively inserted into the cloning sites of the corresponding 5â??tag and 3â??tag vectors were 2 DNA fragments of the 129/Sv-14qC3 locus. The linearized 5â??tag vector was electroporated into W9.5 embryonic stem (ES) cells derived from 129/SvEvTac. Correctly targeted ES cell were then electroporated with the linearized 3â??tag vector. Chimeras were obtained after injection of the targeted ES clones into blastocysts derived from C57BL/6 mice. From the chimeras, mice were obtained with the loxP-flanked CDR allele in germline CDRfl/+, as determined by Southern blot analysis.
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: Common deleted region of h13q14/m14qC3

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes:

Handling

Format:
Concentration:
Passage number:
Growth medium:
Temperature:
Atmosphere:

Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Embryo/Spermatoza- Dry Ice

Related tools

Related tools:

References

References: Brescia et al. 2018. Cancer Cell. 34(3):453-465.e9. PMID: 30205047. ; MEF2B Instructs Germinal Center Development and Acts as an Oncogene in B Cell Lymphomagenesis.