CLEC9A Mouse

Catalogue number: 151613
Sub-type: Mouse
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: CLEC9A Mouse

Alternate name:

Class:
Conjugate:
Description: These mice may be useful for studying adaptive immune responses to antigens in apoptotic and necrotic cells and for tracking DNGR-1+ dendritic cells. KO mouse strain
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details: Red/ET recombineering (Gene Bridges, Heidelberg, Germany) was used to capture the Clec9a region from BAC clone RP-23 248-K14 (C57BL/6 BAC clone from Invitrogen) into a conventional gene-targeting replacement vector, pFloxRI+tk. Primers included 20 nucleotides pairing with the vector and 70 nucleotides pairing with the desired regions of clec9a. Once the genomic region was captured into the Amp-resistant vector, a cassette including farnesylated EGFP, and the PGK-gb2

promoter followed by Kan/Neo was used and the recombineering homologous recombination step was repeated followed by selection for Kan. EGFP is inserted immediately downstream and in frame with the first two aminoacids from DNGR-1 and disrupts exons 1 and 2, knocking out a region of 1.35 Kb. Transcription is terminated by a strong poly A signal from EGFP. The targeting vector was linearized using Not I prior to transfection into S6B6 hybrid 129S6/C57BL/6 F1 derived embryonic stem (ES) cells by electroporation. Recombinant clones were isolated after culture in G418 and gancyclovir and were screened by PCR using two independent primer pairs with the forward primer in the Neo region and the reverse primer external to the short arm. Correctly targeted, karyotypically euploid ES clones were micro-injected into 3.5 day post coitum C57BL/6 blastocysts and resulting offspring with coat-color chimerism were bred with C57BL/6 females to identify germline transmission. Germline transmitting chimeras were subsequently bred with C57BL/6 females. (The expression of NK1.1 was linked to DNGR-1 deficiency in the clec9agfp mice indicating that the homologous recombination step targeted the chromosome of C57BL/6 origin in the F1 S6B6 ES cells; the use of the congenic (Cg) description in the strain name reflects this fact). Mutant mice were crossed with C57BL/6J for 1 more generation before being crossed with PGK-cre mice [Tg(Pgk-cre)1Lni on a C57BL/6J congenic background] to remove the neo selection cassette. These Clec9agfp mice were subsequently bred to C57BL/6J mice for at least a further 7 generations and were then interbred to generate the homozygous deficient B6(Cg)-Clec9atm1.1Crs animals.

Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: DNGR1

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: Chan et al. 2009. Mol Cell Biol. 29(1):157-71. PMID: 18936157. ; Kinase-inactivated ULK proteins inhibit autophagy via their conserved C-terminal domains using an Atg13-independent mechanism.