Ln12 TCR Tg mice

Catalogue number: 157680
Sub-type: Mouse
Images:

Contributor

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Images:

Tool details

*FOR RESEARCH USE ONLY

Name: Ln12 TCR Tg mice

Alternate name:

Class:
Conjugate:
Description: Tumor cells frequently escape from CD8+ T cell recognition by abrogating MHC-I antigen presentation. Deficiency in processing components, like the transporter associated with antigen processing (TAP), results in strongly decreased surface display of peptide/MHC-I complexes. A class of hidden self-antigens known as T cell epitopes associated with impaired peptide processing (TEIPP), which emerge on tumor cells with such processing defects can be investigated with this model. Using this mouse model, it is possible to investigate the generation of the TEIPP T cell repertoire specifically. These animals harbour rearranged receptors recognizing the Ln12 complex, recognizing a peptide in the context of the non-classical MHC class I molecule Qa-1b (encoded by the H2-T23 gene). The mouse model enables thymus selection and the study of emerging nave CD8+ T cells. Author publication: PMID: 29422902
Purpose:
Parental cell:
Organism:
Tissue:
Model: Transgenic
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details: The Ln12 TCR-transgenic mouse strain was generated by transgenesis of the

TCRÎ? and TCRÎ? genes of the Ln12 T cell clone. The TCRÎ? and TCRÎ? chains were separately cloned into pCRII-TOPO plasmid vectors using RT-PCR and sequenced. Expression of TCRs was performed by retroviral transduction of the TCR genes in C57BL/6 splenocytes using pMX vector. For transgenesis, the two chains were separately cloned into VA-hCD2 vectors and inserts were subsequently injected in C57BL/6 oocytes. (PMID: 29422902)

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

Target details

Target: Ln12 TCR

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: Doorduijn et al. 2016. J Clin Invest. 126(2):784-94. PMID: 26784543.