RMA.Trh4 Kb KO cells

Catalogue number: 157678
Sub-type: Primary
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: RMA.Trh4 Kb KO cells

Alternate name:

Class:
Conjugate:
Description: This cell line overexpresses the ER-resident ceramide synthase Trh4 (transduced by CRISPR) and lacks the H2-Kb gene. It serves as a control in helping to understanding T-cell recognition of the Trh4-derived peptide presented by the MHC class I molecule H2-Db. This peptide-epitope is a prototypic example of a neo-antigen selectively presented by cells with processing defects in the classical MHC class I (MHC-I) pathway. RMA cells have an intact processing pathway and a functional TAP peptide transporter, but overexpress the Trh4 protein and therefore can present the Trh4 peptide. Clear T cell recognition can be observed since the irrelevant MHC class I H2-Kb was knocked out.This population acts as a clear control. CRISPR edited RMA cells.
Purpose:
Parental cell: RMA
Organism: Mouse
Tissue: Lymphatic Tissue
Model: Knock-Out
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:

Production details: Retroviral transduction of the mouse Trh4 gene in an IRES-GFP construct and CRISPR/Cas9 technology
Formulation:
Recommended controls: RMA.Trh4 Db KO cells
Bacterial resistance:
Selectable markers:
Additional notes: CRISPR edited RMA cells. Cancer Research Technology Limited (trading research tools as Ximbio) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here. This license from ERS Genomics Ltd allows Ximbio to develop and commercialise CRISPR-Cas9 modified cell lines for research use only. Ximbio can provide...

Target details

Target: Trh4 Kb KO

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes: Cancer Research Technology Limited (trading research tools as CancerTools.org) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here: https://www.cancertools.org/tool-faqs#hs_cos_wrapper_widget_1649861453796 This license from ERS Genomics Ltd allows CancerTools.org to develop and commercialise CRISPR-Cas9 modified cell lines for research use only. CancerTools.org can provide these modified CRISPR-Cas9 cell lines to comp...

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium: Suspension cells in DMEM+8% FCS
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:

Storage conditions: Liquid Nitrogen
Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Doorduijn et al. 2018. Oncoimmunology. 7(3):e1382793. PMID: 29399388.