

p53Lck-TLX1 Mouse

Catalogue number: 154093

Sub-type: Mouse

Images:

Contributor

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Institute: The Trustees of Columbia University in the City of New York

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: p53Lck-TLX1 Mouse

Alternate name: T Cell Leukemia Homeobox 1, Homeo Box-11, Proto-Oncogene TCL-3, HOX11, TCL3

CancerTools.org

Class:

Conjugate:

Description: TLX1 is an orphan homeobox gene. It was originally discovered in association with 4-7% of cases of T cell acute lymphoblastic leukaemias harbouring a t(10;14)(q24;q11) cytogenetic abnormality. Research showed the presence of the TLX1 gene on chromosome 10q24 juxtaposed with the T cell receptor (TCR) delta regulatory elements on chromosome 10, resulting in aberrant over-expression of the full and intact TLX1 gene. Juxtaposition with the TCR alpha locus was also seen. Elevated TLX1 expression in leukemic blasts is also detected in the absence of a translocation in ~50% (37/76) of paediatric T-ALL cases, as well as rare cases of B-AL. Clinically, TLX1+ T-ALLs are associated with a genetic signature associated with maturation arrest at an early cortical thymocyte stage of T cell development. This model organism recapitulates many molecular features of human leukaemias induced by the TLX family of TF oncogenes.

Purpose:

Parental cell:

Organism:

Tissue:

Model: Transgenic

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The human TLX1 cDNA was amplified by PCR using BamHI restriction site containing primers and cDNA of the human T-cell leukemia cell line ALL-SIL as template and was cloned in the pUC1017 vector, downstream of the mouse T-cell specific p56Lck proximal promoter

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Transgenic mouse expressing human transcription factor Tlx1 in T cell progenitors under control of the LCK promoter

Target details

Target: TLX1

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: Foxler et al. 2018. EMBO Mol Med. 10(8):. PMID: 29930174. ; A HIF-LIMD1 negative feedback mechanism mitigates the pro-tumorigenic effects of hypoxia. ; Chakraborty et al. 2018. Biochem J. 475(10):1793-1806. PMID: 29654110. ; Deregulation of LIMD1-VHL-HIF-1a-VEGF pathway is associated with different stages of cervical cancer. ; Foxler et al. 2012. Nat Cell Biol. 14(2):201-8. PMID: 22286099. ; The LIMD1 protein bridges an association between the prolyl hydroxylases and VHL to repress HIF-1 acti...