

TCL1-870 cell line

Catalogue number: 154650

Sub-type: Continuous

Images:

Contributor

Inventor: Dimitar Efremov

Institute: International Centre For Genetic Engineering And Biotechnology (ICGEB)

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: TCL1-870 cell line

Alternate name:

Class:

Conjugate:

Description: The proliferation and survival of chronic lymphocytic leukemia (CLL) B-cells is regulated by intracellular signaling pathways which are activated by various stimuli such as antigenic stimuli propagated through the B-cell receptor (BCR). For this reason inhibition of antigen-dependent BCR signalling can be considered a promising therapeutic approach in CLL. Some studies have shown that sustained engagement of the BCR induces a powerful antiapoptotic program in CLL cells.

Transduction of the prosurvival BCR signal was shown to involve the recruitment and activation of several kinases, including Syk. Increased basal activity of Syk kinase has been described in CLL and several other B-cell malignancies and shown to contribute to the increased apoptosis resistance of the malignant lymphocytes. Interestingly, the antiapoptotic program in CLL cells caused by sustained BCR engagement can be completely abrogated with selective inhibition of Syk kinase, suggesting that the Syk kinase could be a potential target for therapeutic intervention. This E-TCL1-870 cell line (a transgenic mouse model of chronic lymphocytic leukemia) weakly expresses Syk kinase.

Purpose:

Parental cell: E-TCL1

Organism: Mouse

Tissue: Lymphatic Tissue

Model: Cancer Model

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Established from an E μ -TCL1 transgenic colony which had a B6/C3H background. Adoptive-transfer experiments with this leukemia was done in B6/C3H F1 recipients (6- to 8-week-old female mice). For adoptive transfer, 1.5×10^7 TCL1 leukemia cells were thawed, resuspended in 500 μ L of phosphate-buffered saline (PBS), and injected intraperitoneally into the syngeneic recipients. Mice were followed for leukemia development and were euthanized when they developed signs and symptoms of...

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: e.g. chronic lymphocytic leukemia

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes: TCL1-870 murine leukaemia cells are splenic B cells which express high levels of phosphorylated Syk. They have low viability in vitro.

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: Must be propagated in vivo.

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: The Syk inhibitor fostamatinib disodium (R788) inhibits tumor growth in the E-TCL1 transgenic mouse model of CLL by blocking antigen-dependent B-cell receptor signalling.

CancerTools.org