2fTGH-U2A Cell Line

Catalogue number: 151807
Sub-type: Continuous
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: 2fTGH-U2A Cell Line

Alternate name:

Class:
Conjugate:
Description: The 2fTGH-U2A Cell Line is part of a panel of IFNy pathway mutant fibrosarcoma cell lines isolated by chemical mutagenesis of IFNy insensitive reporter cells derived from HT1080 cells. Knockout genes have been identified and span multiple members of the IFMy pathway. These cell lines are be useful for the in vitro study and comparison of disrupted interferon signalling at multiple points across the IFN pathway. The following cell lines are part of the group of IFN signalling mutants: U4C, U2A, U3A, 2FTGH, U6A, U5A. Each containing a different mutation in the IFN signalling pathway.
Purpose:
Parental cell: HT 1080
Organism: Human
Tissue:
Model: Mutant
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details: Human; HT1080 human sarcoma cell lines transfected with a vector encoding a

selectable marker regulated by interferon to create the 2fTGH cell line, enabling selection of mutations in genes encoding components of the interferon signalling pathway. Chemical mutagenesis of the 2fTGH cell line enabled isolation of 10 IFNg signalling mutants.
Formulation:
Recommended controls: The wild type 2FTGH human fibrosarcoma as a positive control together with the U5a and U3a IFNB resistant cell lines.
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: IFN signalling mutant U2A

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes:

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium: Parental 2fTGH and mutant cell lines can be grown in DMEM with 10% FCS.
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Dry ice

Related tools

Related tools: 2fTGH Cell Line ; 2fTGH-U4C Cell Line ; 2fTGH-U6A Cell Line ; 2fTGH-U5A Cell Line ; 2fTGH-U4A Cell Line ; 2fTGH-U3A Cell Line

References

References: Haan et al. 2008. J Immunol. 180(2):998-1007. PMID: 18178840. ; Dual role of the Jak1 FERM and kinase domains in cytokine receptor binding and in stimulation-dependent Jak activation. ; Sun et al. 2004. J Interferon Cytokine Res. 24(6):350-61. PMID: 15212709. ; Ectopic expression of toll-like receptor-3 (TLR-3) overcomes the double-stranded RNA (dsRNA) signaling defects of P2.1 cells. ; Guo et al. 2000. Virology. 267(2):209-19. PMID: 10662616. ; Induction of the human protein P56 by interferon, double-stranded RNA, or virus infection. ; Leaman et al. 1998. Proc Natl Acad Sci U S A. 95(16):9442-7. PMID: 9689099. ; A mutant cell line defective in response to double-stranded RNA and in regulating basal expression of interferon-stimulated genes. ; Kohlhuber et al. 1997. Mol Cell Biol. 17(2):695-706. PMID: 9001223. ; A JAK1/JAK2 chimera can sustain alpha and gamma interferon responses. ; Rani et al. 1996. J Biol Chem. 271(37):22878-84. PMID: 8798467. ; Characterization of beta-R1, a gene that is selectively induced by interferon beta (IFN-beta) compared with IFN-alpha. ; Lutfalla et al. 1995. EMBO J. 14(20):5100-8. PMID: 7588638. ; Mutant U5A cells are complemented by an interferon-alpha beta receptor subunit generated by alternative processing of a new member of a cytokine receptor gene cluster. ; McKendry et al. 1991. Proc Natl Acad Sci U S A. 88(24):11455-9. PMID: 1837150. ; High-frequency mutagenesis of human cells and characterization of a mutant unresponsive to both alpha and gamma interferons. ; Pellegrini et al. 1989. Mol Cell Biol. 9(11):4605-12. PMID: 2513475. ; Use of a selectable marker regulated by alpha interferon to obtain mutations in the signaling pathway.