

# 2fTGH Cell Line

**Catalogue number:** 151484

**Sub-type:** Continuous

**Images:**

## Contributor

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**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** 2fTGH Cell Line

**Alternate name:**

**Class:**

**Conjugate:**

**Description:** The 2fTGH Cell Line is part of a panel of IFN $\gamma$  pathway mutant fibrosarcoma cell lines isolated by chemical mutagenesis of IFN $\gamma$  insensitive reporter cells derived from HT1080 cells.

Knockout genes have been identified and span multiple members of the IFN $\gamma$  pathway. These cell lines are 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; HT 1080 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 IFN $\gamma$  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 $\gamma$  signalling mutants, alpha interferon signalling pathway, IFN regulated human gene 6-16

**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-U6A Cell Line ; 2fTGH-U4C Cell Line ; 2fTGH-U2A Cell Line ; 2fTGH-U5A Cell Line ; 2fTGH-U4A Cell Line ; 2fTGH-U3A Cell Line ; 2fTGH-U2A Cell Line ; 2fTGH-U3A Cell Line ;

2fTGH-U4A Cell Line ; 2fTGH-U4C Cell Line ; 2fTGH-U5A Cell Line ; 2fTGH-U6A Cell Line

## References

**References:** Nissim et al. 2019. *Nat Genet.* 51(9):1308-1314. PMID: 31406347. ; Gao et al. 2019. *J Mol Cell Biol.* 11(6):448-462. PMID: 30428031. ; Murdoch et al. 2019. *PLoS Pathog.* 15(3):e1007381. PMID: 30845179. ; Hong et al. 2018. *Mol Med Rep.* 17(2):2837-2844. PMID: 29257268. ; Hong et al. 2018. *Mol Med Rep.* 17(2):2837-2844. PMID: 29257268. ; Freudenblum et al. 2018. *Development.* 145(3):. PMID: 29386244. ; Freudenblum et al. 2018. *Development.* 145(3):. PMID: 29386244. ; Tom et al. 2015. *Sci Rep.* 5:14384. PMID: 26399509. ; Kimmel et al. 2015. *Sci Rep.* 5:14241. PMID: 26384018. ; Wang et al. 2015. *Dev Dyn.* 244(6):724-35. PMID: 25773748. ; Ningappa et al. 2015. *PLoS One.* 10(9):e0138381. PMID: 26379158. ; Flasse et al. 2013. *Dev Biol.* 376(2):187-97. PMID: 23352790. ; Palha et al. 2013. *PLoS Pathog.* 9(9):e1003619. PMID: 24039582. ; Garnaas et al. 2012. *Dev Biol.* 372(2):178-89. PMID: 22982668. ; Manfroid et al. 2012. *Dev Biol.* 366(2):268-78. PMID: 22537488. ; Ninov et al. 2012. *Development.* 139(9):1557-67. PMID: 22492351. ; Poulain et al. 2011. *Development.* 138(16):3557-68. PMID: 21771809. ; Shin et al. 2011. *Development.* 138(7):1339-48. PMID: 21385764. ; Matthews et al. 2008. *Dev Dyn.* 237(1):124-31. PMID: 18095340. ; Transcription factor onecut3 regulates intrahepatic biliary development in zebrafish. ; Dong et al. 2007. *Nat Genet.* 39(3):397-402. PMID: 17259985. ; Fgf10 regulates hepatopancreatic ductal system patterning and differentiation. ; Bates et al. 2006. *Dev Biol.* 297(2):374-86. PMID: 16781702. ; Distinct signals from the microbiota promote different aspects of zebrafish gut differentiation. ; Crosnier et al. 2005. *Development.* 132(5):1093-104. PMID: 15689380. ; Delta-Notch signalling controls commitment to a secretory fate in the zebrafish intestine.