

RPE1 FRT/TR Cell Line

Catalogue number: 153242

Sub-type:

Images:

Contributor

Inventor: Jonathon Pines

Institute: University of Cambridge

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: RPE1 FRT/TR Cell Line

Alternate name:

Class:

Conjugate:

Description: This cell line can be used to generate cell lines with tetracycline inducible expression of genes of interest. The cell line has a randomly integrated FRT locus and Tet repressor for Flp-In expression. For example the originator of the cell line used this cell line to generate tetracycline-inducible cell lines expressing APC15-IRES2-mRuby, APC15-3xflag and Cyclin B1-L45A-HA using the FLIP-in system and a modified pCDNA5/FRT/TO vector.

Purpose:

Parental cell: RPE1

Organism: Human

Tissue: Eye

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent cell line

Production details: This tetracycline-inducible RPE1 cell line was created by random integration of an FRT site and a Tet repressor gene into retinal pigment epithelial 1 (RPE1) cells.

Formulation:

Recommended controls:**Bacterial resistance:****Selectable markers:**

Additional notes: FAQs: What resistance does this line carry? This cell line is resistant to Zeocin (from FRT) and Blasticidin (from TR). It is also resistant to hygromycin and puromycin as this has been inherited from the parental RPE1 cell line. When the inventors made this line, they swapped the hygromycin resistance cassette in the original pcDNA5/FRT/TO plasmid for a neomycin resistance marker and so use geneticin (a neomycin analogue) for selection after Flp-In integration. How ...

Target details

Target:**Target alternate names:****Target background:****Molecular weight:****Ic50:**

Applications

Application:

Application notes: This cell line is resistant to Hygromycin (hTERT), Zeocin (FRT), Blasticidin (TR) and Puromycin (hTERT). The hygromycin resistance cassette in the original plasmid was replaced with neomycin resistance. For selection after the Flp-In integration the inventors used Geneticin G418 sulphate (an analog of neomycin sulphate) at a final concentration of 0.5 mg/mL.

Handling

Format: Frozen**Concentration:****Passage number:**

Growth medium: F12:DMEM (1:1) media supplemented with 10% FCS.

Temperature:**Atmosphere:****Volume:****Storage medium:****Storage buffer:**

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Tozer et al. 2008. Cancer Res. 68(7):2301-11. PMID: 18381437. ; Blood vessel maturation and response to vascular-disrupting therapy in single vascular endothelial growth factor-A isoform-producing tumors.

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