

U2OS E2F7 KO cell line

Catalogue number: 156469

Sub-type: Continuous

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: U2OS E2F7 KO cell line

Alternate name: U-2 OS

Class:

Conjugate:

Description: E2F7 is a transcription factor that participates in various processes such as cell cycle regulation and DNA damage response by mediating transcriptional repression of target genes involved in G1/S regulation as well as in DNA replication and repair. E2F7 behaves as a tumour suppressor by inhibiting DNA repair activity of tumour cells upon chemotherapy treatment. Loss of E2F7 by CRISPR knockout confers increased resistance to chemotherapy in BRCA2-deficient cells. CRISPR edited U2OS cells.

Purpose:

Parental cell: U2OS

Organism: Human

Tissue: Bone

Model: Knock-Out

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Increased G2/M checkpoint recovery competence and improved viability upon treatment with compounds that affect replication fork progression (cisplatin, mitomycin C, olaparib).

Production details:

E2F7 knockout cells were generated using the CRISPR/Cas9 system. A CRISPR guide RNA (gRNA) targeting the first coding exon of E2F7 was designed using Benchling, and cloned into the BbsI site of pX330 (42230, Addgene). U2OS cells were co-transfected with this plasmid, together with a plasmid containing a gRNA to the zebrafish TIA gene (5'-GGTATGTCGGGAACCTCTCC3') and a P2A-puromycin resistance cassette flanked by two TIA target sites. Co-transfection results in excision of the cassette and subs...

Formulation:

Recommended controls: Parental U2OS cells, puromycin sensitive

Bacterial resistance:

Selectable markers:

Additional notes: CRISPR edited U2OS cells. Cancer Research Technology Limited (trading research tools as Ximbio) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here. This license from ERS Genomics Ltd allows Ximbio to develop and commercialise CRISPR-Cas9 modified cell lines for research use only. Ximbio can provid...

Target details

Target: Full knockout for the E2F7 gene

Target alternate names:

Target background:

Molecular weight:

lc50:

Applications

Application:

Application notes: Cancer Research Technology Limited (trading research tools as CancerTools.org) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here: https://www.cancertools.org/tool-faqs#hs_cos_wrapper_widget_1649861453796 This license from ERS Genomics Ltd allows CancerTools.org to develop and commercialise CRISPR-Cas9 modified cell lines for research use only. CancerTools.org can provide these modified CRISPR-Cas9 cell lines to comp...

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: Dulbecco's modified Eagle's medium (DMEM) supplemented with 10% fetal bovine serum (FBS)

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References:

CancerTools.org