

SOD2 Cell Line

Catalogue number: 153875

Sub-type: Continuous

Images:

Contributor

Inventor: Fredrick Domann

Institute: The University Of Iowa

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: SOD2 Cell Line

Alternate name: SOD2

Class:

Conjugate:

Description: The SOD2-null HEK293T cell line (as generated by CRISPR) is the first known human cell line that completely lacks the enzyme responsible for removing mitochondrial superoxide generated during respiration. The resulting cells will provide an invaluable model for investigators across multiple disciplines as they search for ways to improve and boost mitochondrial function. This cell line has both basic research and translational research potential since many people have mitochondrial diseases and this new cell line will serve as an important model system to explore agents and treatments that can augment impaired mitochondrial function in multiple disciplines such as cancer, diabetes and metabolism. Used as a mitochondria defective model

Purpose:

Parental cell: HEK293T

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Targeted gene editing by CRISPR/Cas9

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: CRISPR edited HEK293T 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 pro...

Target details

Target: Superoxide dismutase 2

Target alternate names:

Target background:

Molecular weight:

Ic50:

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:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Jonker et al. 2003. Mol Cell Biol. 23(21):7902-8. PMID: 14560032. ; Deficiency in the organic cation transporters 1 and 2 (Oct1/Oct2 [Slc22a1/Slc22a2]) in mice abolishes renal secretion of organic cations. ; Jonker et al. 2001. Mol Cell Biol. 21(16):5471-7. PMID: 11463829. ; Reduced hepatic uptake and intestinal excretion of organic cations in mice with a targeted disruption of the organic cation transporter 1 (Oct1 [Slc22a1]) gene.

CancerTools.org