

Msh3-/- SVG-A Cell Line

Catalogue number: 153562

Sub-type: Continuous

Images:

Contributor

Inventor: Robert Lahue

Institute: National University of Ireland Galway ; Brown University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Msh3-/- SVG-A Cell Line

Alternate name: DNA mismatch repair protein Msh3, hMSH3, Divergent upstream protein, DUP, Mismatch repair protein 1, MRP1

Class:

Conjugate:

Description: The MSH3 gene encodes a DNA mismatch repair protein important in certain cancer types and in certain neurodegenerative diseases. Exon 2 of the MSH3 gene was targeted by CRISPR/Cas9. The resulting Msh3-/- cell line encodes a 3 amino acid deletion in Msh3 that results in 98% loss of Msh3 protein, as judged by western blots with two different antibodies. While ~98% of Msh3 protein is lost in these cells, the abundance of the related proteins Msh2 and Msh6 appear unaffected. This is relevant to DNA mismatch repair.

Purpose:

Parental cell: SVG-A immortalized human astrocytes

Organism: Human

Tissue: Brain

Model: Knock-Out

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent cell line

Production details:

Exon 2 of the MSH3 gene was targeted by CRISPR/Cas9. The resulting Msh3^{-/-} cell line encodes a 3 amino acid deletion in Msh3 that results in 98% loss of Msh3 protein, as judged by western blots with two different antibodies.

Formulation:

Recommended controls: SVG-A Cell Line, SVG-A Msh3 1.7X Cell Line (derived from Msh3^{-/-} SVG-A Cell Line)

Bacterial resistance:

Selectable markers:

Additional notes: CRISPR edited 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 provide the...

Target details

Target: Msh3

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application: Applications tested: DNA repair assays Microsatellite instability Trinucleotide expansion assay Cell background for rescue with wild type or variant Msh3 clones Immunoprecipitation control for Msh2-Msh3 protein complex Functional analysis of Msh3 variants

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: DMEM supplemented with 10% FBS

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools: SVG-A Cell Line ; SVG-A Msh3 1.7X Cell Line

References

References: Park et al. 2003. Pancreas. 26:348-54.

CancerTools.org