

ROS1 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20883c

Specification

ROS1 Blocking Peptide (C-term) - Product Information

Primary Accession

P08922

ROS1 Blocking Peptide (C-term) - Additional Information

Gene ID 6098

Other Names

Proto-oncogene tyrosine-protein kinase ROS, Proto-oncogene c-Ros, Proto-oncogene c-Ros-1, Receptor tyrosine kinase c-ros oncogene 1, c-Ros receptor tyrosine kinase, ROS1, MCF3, ROS

Target/Specificity

The synthetic peptide sequence is selected from aa 1744-1757 of HUMAN ROS1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ROS1 Blocking Peptide (C-term) - Protein Information

Name ROS1

Synonyms MCF3, ROS

Function

Receptor tyrosine kinase (RTK) that plays a role in epithelial cell differentiation and regionalization of the proximal epididymal epithelium. NELL2 is an endogenous ligand for ROS1. Upon endogenous stimulation by NELL2, ROS1 activates the intracellular signaling pathway and triggers epididymal epithelial differentiation and subsequent sperm maturation (By similarity). May activate several downstream signaling pathways related to cell differentiation, proliferation, growth and survival including the PI3 kinase-mTOR signaling pathway. Mediates the phosphorylation of PTPN11, an activator of this pathway. May also phosphorylate and activate the transcription factor STAT3 to control anchorage-independent cell growth. Mediates the phosphorylation and the activation of VAV3, a guanine nucleotide exchange factor regulating cell morphology. May activate other downstream signaling proteins including AKT1, MAPK1, MAPK3, IRS1 and PLCG2.



Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed in brain. Expression is increased in primary gliomas.

ROS1 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

ROS1 Blocking Peptide (C-term) - Images

ROS1 Blocking Peptide (C-term) - Background

Orphan receptor tyrosine kinase (RTK) that plays a role in epithelial cell differentiation and regionalization of the proximal epididymal epithelium. May activate several downstream signaling pathways related to cell differentiation, proliferation, growth and survival including the PI3 kinase-mTOR signaling pathway. Mediates the phosphorylation of PTPN11, an activator of this pathway. May also phosphorylate and activate the transcription factor STAT3 to control anchorage-independent cell growth. Mediates the phosphorylation and the activation of VAV3, a guanine nucleotide exchange factor regulating cell morphology. May activate other downstream signaling proteins including AKT1, MAPK1, MAPK3, IRS1 and PLCG2.

ROS1 Blocking Peptide (C-term) - References

Birchmeier C., et al. Proc. Natl. Acad. Sci. U.S.A. 87:4799-4803(1990). Mungall A.J., et al. Nature 425:805-811(2003). Matsushime H., et al. Mol. Cell. Biol. 6:3000-3004(1986). Birchmeier C., et al. Mol. Cell. Biol. 6:3109-3116(1986). Watkins D., et al. Cancer Genet. Cytogenet. 72:130-136(1994).