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ROS1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20883c

Product Information

Application	WB, E
Primary Accession	P08922
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50575
Calculated MW	263915

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	This ROS1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1744-1777 amino acids from the C-terminal region of human ROS1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ROS1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

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.

References

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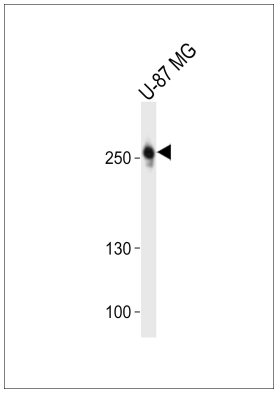
Mungall A.J.,et al.Nature 425:805-811(2003).
Matsushime H.,et al.Mol. Cell. Biol. 6:3000-3004(1986).
Birchmeier C.,et al.Mol. Cell. Biol. 6:3109-3116(1986).
Watkins D.,et al.Cancer Genet. Cytogenet. 72:130-136(1994).

Images



Western blot analysis of lysate from U-87 MG cell line, using ROS1 Antibody (C-term)(Cat. #AP20883c). AP20883c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.