10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ROS1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8639b

Product Information

Application	WB, IHC-P, E
Primary Accession	P08922
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1843CT776.78.21
Calculated MW	263915

Additional Information

Gene ID	6098
Other Names	Proto-oncogene tyrosine-protein kinase ROS, 2.7.10.1, 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 mouse immunized with a recombinant protein of human ROS1.
Dilution	WB~~1:4000 IHC-P~~1:250 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 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.

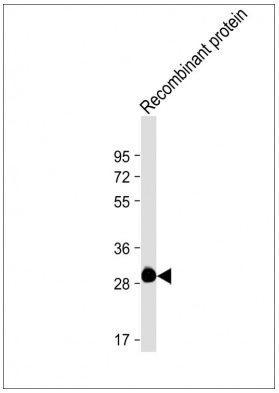
Background

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

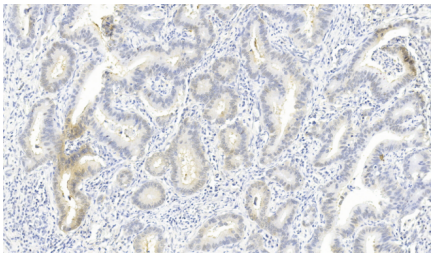
Birchmeier C.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:4799-4803(1990).
Mungall A.J.,et al.Nature 425:805-811(2003).
Matsushime H.,et al.Mol. Cell. Biol. 6:3000-3004(1986).
Birchmeier C.,et al.Mol. Cell. Biol. 6:3109-3116(1986).
Watkins D.,et al.Cancer Genet. Cytogenet. 72:130-136(1994).

Images



Anti-ROS1 Antibody at 1:4000 dilution + Recombinant protein Lysates/proteins at 20ng per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 264 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Immunohistochemical analysis of paraffin-embedded Human Lung adenocarcinoma section using Pink1(Cat#AM8639b). AM8639b was diluted at 1:250 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.