

**ROS1 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8639b**

**Specification**

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**ROS1 Antibody - Product Information**

Application	IHC, WB,E
Primary Accession	<a href="#">P08922</a>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	263915

**ROS1 Antibody - 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**

IHC~~1:250  
WB~~1:4000

**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.

**ROS1 Antibody - 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**

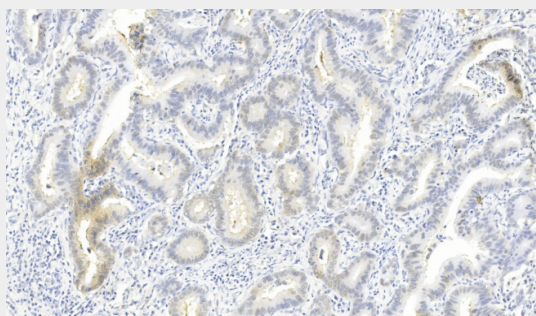
Expressed in brain. Expression is increased in primary gliomas.

### **ROS1 Antibody - Protocols**

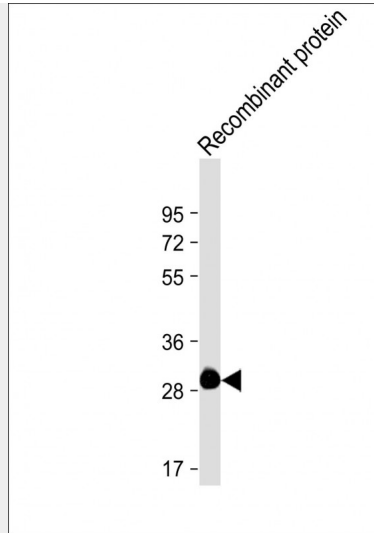
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **ROS1 Antibody - Images**



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



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.

### **ROS1 Antibody - 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 Antibody - 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).