

# ROS1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5493

## **Product Information**

**Application** WB **Primary Accession** P08922 Reactivity Human Host Rabbit Clonality Polyclonal Calculated MW 263915 Isotype Rabbit IgG **Antigen Source HUMAN** 

## **Additional Information**

**Gene ID** 6098

Antigen Region 1744-1777

**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

**Dilution** WB~~1:1000

**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.

**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.

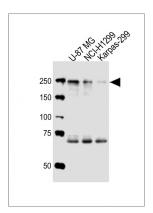
# **Background**

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

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**



All lanes: Anti-ROS1 Antibody (C-term) at 1:1000 dilution Lane 1: U-87 MG whole cell lysates Lane 2: NCI-H1299 whole cell lysates Lane 3: Karpas-299 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 264 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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