

## ROR1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7671D

## Specification

# **ROR1 Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype WB, IHC-P, FC,E <u>001973</u> Human, Mouse Rabbit Polyclonal Rabbit IgG

## **ROR1** Antibody - Additional Information

Gene ID 4919

**Other Names** Tyrosine-protein kinase transmembrane receptor ROR1, Neurotrophic tyrosine kinase, receptor-related 1, ROR1, NTRKR1

**Target/Specificity** This ROR1 antibody is generated from rabbits immunized with recombinant human ROR1 protein (aa region: 112 - 399).

**Dilution** WB~~1:4000 IHC-P~~1:100 FC~~1:25

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** ROR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **ROR1 Antibody - Protein Information**

Name ROR1

Synonyms NTRKR1

Function Has very low kinase activity in vitro and is unlikely to function as a tyrosine kinase in



vivo (PubMed:<u>25029443</u>). Receptor for ligand WNT5A which activate downstream NFkB signaling pathway and may result in the inhibition of WNT3A-mediated signaling (PubMed:<u>25029443</u>, PubMed:<u>27162350</u>). In inner ear, crucial for spiral ganglion neurons to innervate auditory hair cells (PubMed:<u>27162350</u>). Via IGFBP5 ligand, forms a complex with ERBB2 to enhance CREB oncogenic signaling (PubMed:<u>36949068</u>).

Cellular Location Membrane; Single- pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q9Z139}

#### **Tissue Location**

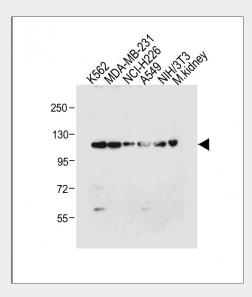
Expressed strongly in human heart, lung and kidney, but weakly in the CNS. Isoform Short is strongly expressed in fetal and adult CNS and in a variety of human cancers, including those originating from CNS or PNS neuroectoderm

## **ROR1 Antibody - Protocols**

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

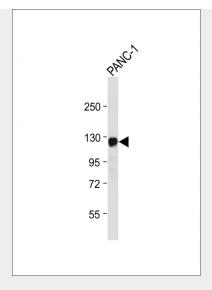
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **ROR1 Antibody - Images**



All lanes : Anti-ROR1 Antibody at 1:4000 dilution Lane 1: K562 whole cell lysate Lane 2: MDA-MB-231 whole cell lysate Lane 3: NCI-H226 whole cell lysate Lane 4: A549 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: Mouse kidney tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 104 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



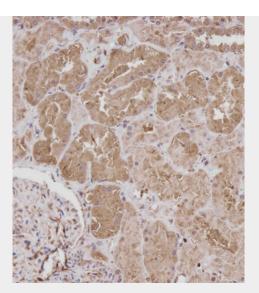


Anti-ROR1 Antibody at 1:4000 dilution + PANC-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 104 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

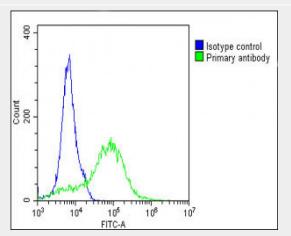


Immunohistochemical analysis of AP7671d on paraffin-embedded Human heart tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.





Immunohistochemical analysis of AP7671d on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing A549 cells stained with AP7671d(green line). The cells were fixed with 2% paraformaldehyde (10 min). The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7671d, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

# ROR1 Antibody - Background

ROR1 is a receptor protein tyrosine kinase whose cellular role has not been determined. It is a type I membrane protein and belongs to the ROR subfamily of cell surface receptors. Studies of a similar protein in mouse suggest that this protein may interact with another receptor protein tyrosine kinase and may be involved in skeletal and cardiac development.

# **ROR1 Antibody - References**

Nomi, M., et al., Mol. Cell. Biol. 21(24):8329-8335 (2001). Reddy, U.R., et al., Genomics 41(2):283-285 (1997). Reddy, U.R., et al., Oncogene 13(7):1555-1559 (1996). Masiakowski, P., et al., J. Biol. Chem. 267(36):26181-26190 (1992). ROR1 Antibody - Citations

• Frizzled 1 and Wnt1 as new potential therapeutic targets in the traumatically injured spinal cord