

**ROR2 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1922a**

**Specification**

**ROR2 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | <b>E, WB, FC</b>       |
| Primary Accession | <a href="#">Q01974</a> |
| Reactivity        | <b>Human</b>           |
| Host              | <b>Mouse</b>           |
| Clonality         | <b>Monoclonal</b>      |
| Isotype           | <b>IgG1</b>            |
| Calculated MW     | <b>104.8kDa KDa</b>    |

**Description**

The protein encoded by this gene is a receptor protein tyrosine kinase and type I transmembrane protein that belongs to the ROR subfamily of cell surface receptors. The protein may be involved in the early formation of the chondrocytes and may be required for cartilage and growth plate development. Mutations in this gene can cause brachydactyly type B, a skeletal disorder characterized by hypoplasia/aplasia of distal phalanges and nails. In addition, mutations in this gene can cause the autosomal recessive form of Robinow syndrome, which is characterized by skeletal dysplasia with generalized limb bone shortening, segmental defects of the spine, brachydactyly, and a dysmorphic facial appearance.

**Immunogen**

Purified recombinant fragment of human ROR2 (AA: 59-155) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide.

**ROR2 Antibody - Additional Information**

**Gene ID** 4920

**Other Names**

Tyrosine-protein kinase transmembrane receptor ROR2, 2.7.10.1, Neurotrophic tyrosine kinase, receptor-related 2, ROR2, NTRKR2

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ROR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## ROR2 Antibody - Protein Information

**Name** ROR2

**Synonyms** NTRKR2

### Function

Tyrosine-protein kinase receptor which may be involved in the early formation of the chondrocytes. It seems to be required for cartilage and growth plate development (By similarity). Phosphorylates YWHAB, leading to induction of osteogenesis and bone formation (PubMed:<a href="http://www.uniprot.org/citations/17717073" target="\_blank">17717073</a>). In contrast, has also been shown to have very little tyrosine kinase activity in vitro. May act as a receptor for wnt ligand WNT5A which may result in the inhibition of WNT3A-mediated signaling (PubMed:<a href="http://www.uniprot.org/citations/25029443" target="\_blank">25029443</a>).

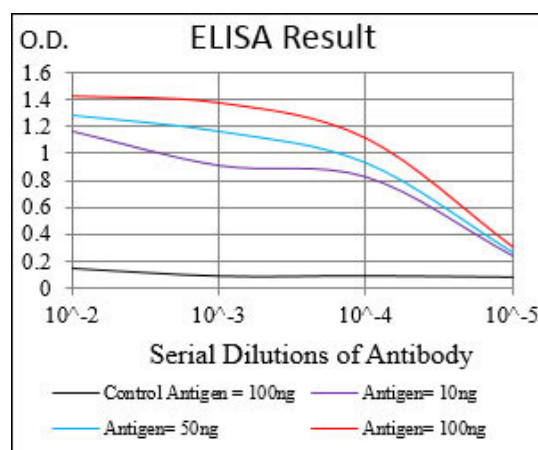
### Cellular Location

Cell membrane; Single-pass type I membrane protein

## ROR2 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](#)



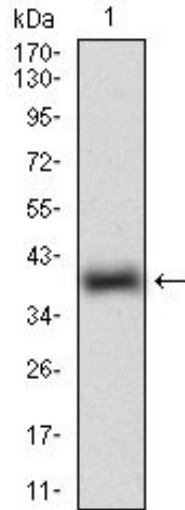


Figure 1: Western blot analysis using ROR2 mAb against human ROR2 (AA: 59-155) recombinant protein. (Expected MW is 36.8 kDa)

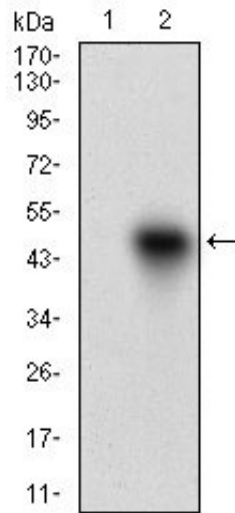


Figure 2: Western blot analysis using ROR2 mAb against HEK293 (1) and ROR2 (AA: 59-155)-hIgGFc transfected HEK293 (2) cell lysate.

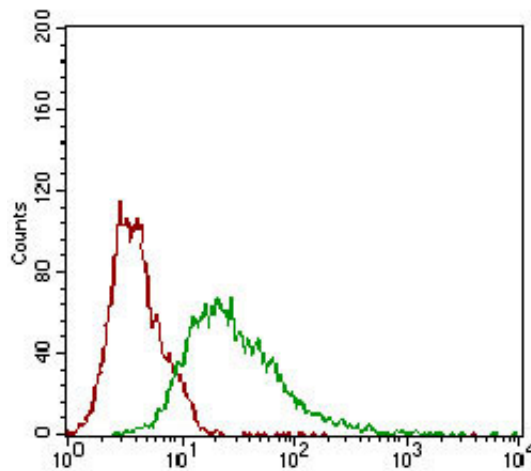


Figure 3: Flow cytometric analysis of HeLa cells using ROR2 mouse mAb (green) and negative control (red).

### **ROR2 Antibody - Background**

The protein encoded by this gene is a member of the chromogranin/secretogranin family of neuroendocrine secretory proteins. It is found in secretory vesicles of neurons and endocrine cells. This gene product is a precursor to three biologically active peptides; vasostatin, pancreastatin, and parastatin. These peptides act as autocrine or paracrine negative modulators of the neuroendocrine system. Other peptides, including chromostatin, beta-granin, WE-14 and GE-25, are also derived from the full-length protein. However, biological activities for these molecules have not been shown. ; ;

### **ROR2 Antibody - References**

1. Int J Cancer. 2013 Aug 15;133(4):779-87.
2. Mol Cancer. 2010 Jun 30;9:170.