

### **ROR2 Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7672b

### **Specification**

## **ROR2 Antibody (C-term) - Product Information**

Application IHC-P, WB,E
Primary Accession Q01974
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 915-943

## ROR2 Antibody (C-term) - Additional Information

#### **Gene ID 4920**

#### **Other Names**

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

# **Target/Specificity**

This ROR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 915-943 amino acids from the C-terminal region of human ROR2.

#### **Dilution**

IHC-P~~1:50~100 WB~~1:1000-1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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**

ROR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ROR2 Antibody (C-term) - Protein Information**

#### Name ROR2

## Synonyms NTRKR2





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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:17717073). 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: 25029443).

### **Cellular Location**

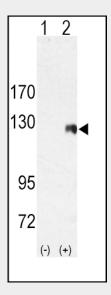
Cell membrane; Single-pass type I membrane protein

## **ROR2 Antibody (C-term) - Protocols**

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

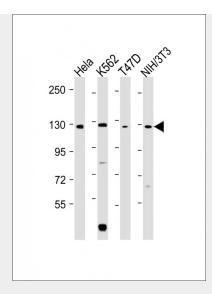
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### ROR2 Antibody (C-term) - Images

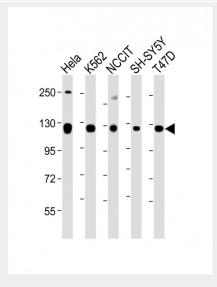


Western blot analysis of ROR2 (arrow) using rabbit polyclonal ROR2 Antibody (C-term) (Cat.#AP7672b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ROR2 gene (Lane 2) (Origene Technologies).



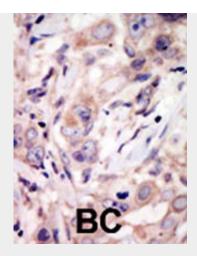


All lanes: Anti-ROR2 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: K562 whole cell lysate Lane 3: T47D whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 105 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-ROR2 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: K562 whole cell lysate Lane 3: NCCIT whole cell lysate Lane 4: SH-SY5Y whole cell lysate Lane 5: T47D whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 105 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# ROR2 Antibody (C-term) - Background

ROR2 is a 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. This Type I membrane protein is expressed at high levels during early embryonic development. The expression levels drop strongly around day 16 and there are only very low levels in adult tissues. Defects in ROR2 are a cause of brachydactyly type B1 (BDB1). BDB1 is an autosomal dominant skeletal disorder characterized by hypoplasia/aplasia of distal phalanges and nails. In BDB1 the middle phalanges are short but in addition the terminal phalanges are rudimentary or absent. Both fingers and toes are affected. The thumbs and big toes are usually deformed. Defects in ROR2 are a cause of recessive Robinow syndrome (RRS). RRS is an autosomal disorder characterized by skeletal dysplasia with generalized limb bone shortening, segmental defects of the spine, brachydactyly and a dysmorphic facial appearance. The protein contains 1 frizzled (FZ) domain, 1 immunoglobulin-like C2-type domain, and 1 kringle domain.

### **ROR2 Antibody (C-term) - References**

Afzal, A.R., et al., Nat. Genet. 25(4):419-422 (2000).
Oldridge, M., et al., Nat. Genet. 24(3):275-278 (2000).
van Bokhoven, H., et al., Nat. Genet. 25(4):423-426 (2000).
Schwabe, G.C., et al., Am. J. Hum. Genet. 67(4):822-831 (2000).
Masiakowski, P., et al., J. Biol. Chem. 267(36):26181-26190 (1992).