

ROR2 Antibody (NT)

Rabbit Polyclonal Antibody Catalog # ABV11250

Specification

ROR2 Antibody (NT) - Product Information

WB, IHC <u>Q01974</u> Human Rabbit Polyclonal Rabbit IgG

ROR2 Antibody (NT) - Additional Information

Gene ID 4920

Positive Control

Western Blot: 293 cell lysate, IHC: Paraffin embedded human kidney carcinoma, FACS: NCI-H292 Western blot: 1:1000, IHC: 1:10 to 1:50, FACS: 1:10 to 1:50

Application & Usage

Other Names

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

Target/Specificity ROR2

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μl of antibody in PBS with 0.09% (W/V) sodium azide

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

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



ROR2 Antibody (NT) - 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: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).

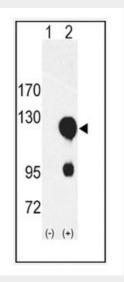
Cellular Location Cell membrane; Single-pass type I membrane protein

ROR2 Antibody (NT) - Protocols

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

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

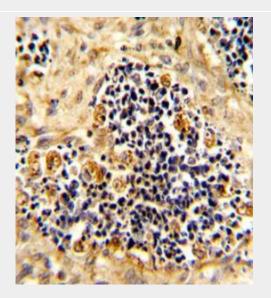
ROR2 Antibody (NT) - Images



Western blot analysis of ROR2 (arrow) using ROR2 Antibody (N-term). 293 cell lysates (2 μ g/lane) either nontransfected (Lane 1) or transiently transfected with the ROR2 gene (Lane 2) were



loaded



Formalin-fixed and paraffin-embedded human kidney carcinoma reacted with ROR2 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.

ROR2 Antibody (NT) - Background

ROR2 (receptor tyrosine kinase-like orphan receptor 2), also known as neurotrophic tyrosine kinase receptor-related 2 (NTRKR2), is a single pass transmembrane tyrosine-protein kinase receptor. It contains a cytoplasmic tyrosine kinase domain, distally located serine-threonine-rich domains, an extracellular immunoglobulin-like domain, a cysteine-rich domain and a kringle domain. ROR2 is important for skeletal and endocrine development and is required for cartilage and growth plate development. It promotes the differentiation of osteoblasts and plays an important role in the early formation of chondrocytes. ROR2 may play differential roles during the development of the nervous system. ROR2 sequesters and associates with Dlxin-1 affecting the transcriptional function of Msx-2. ROR2 also interacts with canonical Wnt1 and Wnt3, regulating their signaling pathways. Defects in ROR2 can result in the autosomal dominant skeletal disorder, brachydactylic type B1 or the autosomal recessive skeletal disorder, Robinow syndrome.