

ROR1 (P-288): sc-130867

BACKGROUND

The ROR-family receptor tyrosine kinases consist of two structurally related proteins, ROR1 and ROR2. These proteins are characterized by having intracellular tyrosine kinase domains, which are highly related to Trk-family kinases, extracellular Frizzled-like cysteine-rich domains (CRDs) and Kringle domains. The ROR family members are highly conserved among species, such as *C. elegans*, *Drosophila*, *Xenopus* and mammals. ROR1 and ROR2 are both involved in organogenesis with particular emphasis in neuronal differentiation. Increased expression of ROR1 in acute lymphoblastic leukemias (ALLs) as well as chronic lymphocytic leukemias (CLLs) implicate this protein as a potential tool for targeted immunotherapy in these diseases. ROR2 is involved in the Wnt-signalling pathway, and mutations in ROR2 lead to Brachydactyly type B and Robinow syndrome.

REFERENCES

1. Masiakowski, P., et al. 1992. A novel family of cell surface receptors with tyrosine kinase-like domain. *J. Biol. Chem.* 267: 26181-26190.
2. Paganoni, S., et al. 2003. Expression and subcellular localization of Ror tyrosine kinase receptors are developmentally regulated in cultured hippocampal neurons. *J. Neurosci. Res.* 73: 429-440.

CHROMOSOMAL LOCATION

Genetic locus: ROR1 (human) mapping to 1p31.3; Ror1 (mouse) mapping to 4 C6.

SOURCE

ROR1 (P-288) is a purified rabbit polyclonal antibody raised against an internal region of ROR1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ROR1 (P-288) is recommended for detection of ROR1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ROR1 siRNA (h): sc-76424, ROR1 siRNA (m): sc-76425, ROR1 shRNA Plasmid (h): sc-76424-SH, ROR1 shRNA Plasmid (m): sc-76425-SH, ROR1 shRNA (h) Lentiviral Particles: sc-76424-V and ROR1 shRNA (m) Lentiviral Particles: sc-76425-V.

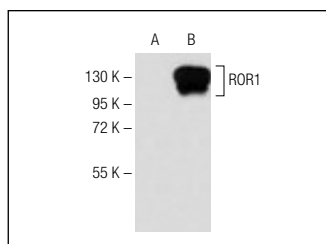
Molecular Weight of ROR1 isoforms: 105/130 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or human ROR1 transfected 293 whole cell lysate.

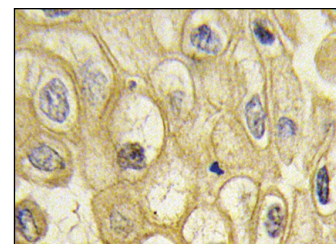
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ROR1 (P-288): sc-130867. Western blot analysis of ROR1 expression in non-transfected (A) and human ROR1 transfected (B) 293 whole cell lysates.



ROR1 (P-288): sc-130867. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lung carcinoma tissue showing cytoplasmic and membrane localization.

SELECT PRODUCT CITATIONS

1. Ozeki, N., et al. 2016. Wnt16 signaling is required for IL-1β-induced matrix metalloproteinase-13-regulated proliferation of human stem cell-derived osteoblastic cells. *Int. J. Mol. Sci.* E-published.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **ROR1 (60-D): sc-130386** or **ROR1 (2H6): sc-293157**, our highly recommended monoclonal alternatives to ROR1 (P-288).