

ROR1 (C-20): sc-83030

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

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CHROMOSOMAL LOCATION

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

SOURCE

ROR1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ROR1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83030 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ROR1 (C-20) is recommended for detection of ROR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ROR family members.

ROR1 (C-20) is also recommended for detection of ROR1 in additional species, including equine, canine, bovine, porcine and avian.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.