Vrho (D-15): sc-165876

SANTA CRUZ®

BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the rhomboid family of integral membrane proteins are related to *Drosophila* rhomboid-1, a serine protease that cleaves the membrane domain of the *Drosophila* EGF-family protein, Spitz, to release a soluble growth factor. Vrho (ventrhoid transmembrane protein), also known as RHBDL3 (rhomboid, veinlet-like 3), is a 404 amino acid multi-pass membrane protein that contains 2 EF-hand domains. Vrho is suggest to take part in regulating intramembrane proteolysis and the subsequent release of functional polypeptides from their membrane anchors. In *Drosophila melanogaster,* Vrho is related to a seven-pass transmembrane protein called rhomboid, which acts as a important positive modulator of EGF signaling thereby playing a significant role in the structuring of ventral neuroectoderm and fate specification of neuroblasts.

REFERENCES

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3. Jászai, J. and Brand, M. 2002. Cloning and expression of ventrhoid, a novel vertebrate homologue of the *Drosophila* EGF pathway gene rhomboid. Mech. Dev. 113: 73-77.

4. Urban, S. and Freeman, M. 2003. Substrate specificity of rhomboid intramembrane proteases is governed by helix-breaking residues in the substrate transmembrane domain. Mol. Cell 11: 1425-1434.

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CHROMOSOMAL LOCATION

Genetic locus: RHBDL3 (human) mapping to 17q11.2; Rhbdl3 (mouse) mapping to 11 B5.

SOURCE

Vrho (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Vrho of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-165876 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Vrho (D-15) is recommended for detection of Vrho 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).

Vrho (D-15) is also recommended for detection of Vrho in additional species, including equine and canine.

Suitable for use as control antibody for Vrho siRNA (h): sc-93813, Vrho siRNA (m): sc-155226, Vrho shRNA Plasmid (h): sc-93813-SH, Vrho shRNA Plasmid (m): sc-155226-SH, Vrho shRNA (h) Lentiviral Particles: sc-93813-V and Vrho shRNA (m) Lentiviral Particles: sc-155226-V.

Molecular Weight of Vrho: 45 kDa.

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.

PROTOCOLS

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