

Ribophorin II (V-20): sc-12167

BACKGROUND

Membrane proteins of the endoplasmic reticulum (ER) may be localized by mechanisms that involve retention, retrieval or a combination of both. ER localization information has been found in cytoplasmic, transmembrane or luminal domains. Specific retrieval mechanisms have been identified for luminal ER proteins, which contain a KDEL domain, and for type I transmembrane proteins carrying a dilysine motif. Mammalian oligosaccharyl-transferase (OST) is a protein complex that is composed of four rough ER-specific, type I transmembrane proteins: Ribophorins I and II (RI and RII), OST48 and DAD1 (also designated defender against apoptotic death). The ribophorins are integral membrane glycoproteins that localize exclusively to the rough ER. There is affinity between the cytoplasmically located N-terminal region of DAD1 and the short cytoplasmic tail of OST48 to place DAD1 firmly into the OST complex. The OST complex affects the cotranslational N-glycosylation of newly synthesized polypeptides.

REFERENCES

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3. Fu, J., Ren, M. and Kreibich, G. 1997. Interactions among subunits of the oligosaccharyltransferase complex. *J. Biol. Chem.* 272: 29687-29692.
4. Sanjay, A., Fu, J. and Kreibich, G. 1998. DAD1 is required for the function and the structural integrity of the oligosaccharyl-transferase complex. *J. Biol. Chem.* 273: 26094-26099.
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6. Fu, J., Pirozzi, G., Sanjay, A., Levy, R., Chen, Y., De Lemos-Chiarandini, C., Sabatini, D. and Kreibich, G. 2000. Localization of ribophorin II to the endoplasmic reticulum involves both its transmembrane and cytoplasmic domains. *Eur. J. Cell Biol.* 79: 219-228.

CHROMOSOMAL LOCATION

Genetic locus: RPN2 (human) mapping to 20q11.23; Rpn2 (mouse) mapping to 2 H1.

SOURCE

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

STORAGE

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

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-12167 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribophorin II (V-20) is recommended for detection of Ribophorin II 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).

Ribophorin II (V-20) is also recommended for detection of Ribophorin II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribophorin II siRNA (h): sc-36422, Ribophorin II siRNA (m): sc-36423, Ribophorin II shRNA Plasmid (h): sc-36422-SH, Ribophorin II shRNA Plasmid (m): sc-36423-SH, Ribophorin II shRNA (h) Lentiviral Particles: sc-36422-V and Ribophorin II shRNA (m) Lentiviral Particles: sc-36423-V.

Molecular Weight of Ribophorin II: 63 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or NIH/3T3 whole cell lysate: sc-2210.

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.

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.


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Try **Ribophorin II (A-1): sc-166421**, our highly recommended monoclonal alternative to Ribophorin II (V-20).