SANTA CRUZ BIOTECHNOLOGY, INC.

ORP-9 (I-12): sc-109743



BACKGROUND

Members of the oxysterol-binding protein (OSBP) family function as intracellular lipid receptors. OSBPs are involved in lipid metabolism and signal transduction, as well as vesicle transport, and can translocate to the periphery of Golgi membranes when they are bound to oxysterols. ORPs (OSBP-related proteins) belong to a subfamily of OSBPs and consists of ORP-1 through ORP-11. The ORPs have a highly conserved OSBP-type sterol-binding region and a Pleckstrin homology domain. They strongly bind to phosphatidic acid and weakly bind to phosphatidylinositol 3-phosphate. ORP-9 is widely expressed, and is produced as two isoforms due to alternative splicing.

REFERENCES

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- 2. Xu, Y., et al. 2001. Novel members of the human oxysterol-binding protein family bind phospholipids and regulate vesicle transport. J. Biol. Chem. 276: 18407-18414.
- 3. Lehto, M., et al. 2001. The OSBP-related protein family in humans. J. Lipid Res. 42: 1203-1213.
- Jaworski, C.J., et al. 2001. A family of human genes containing oxysterolbinding domains. Genomics 78: 185-196.
- Fairn, G.D. and McMaster, C.R. 2005. Identification and assessment of the role of a nominal phospholipid binding region of ORP1S (oxysterol-bindingprotein-related protein 1 short) in the regulation of vesicular transport. Biochem. J. 387: 889-896.
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- Olkkonen, V.M., et al. 2006. The OSBP-related proteins (ORPs): global sterol sensors for co-ordination of cellular lipid metabolism, membrane trafficking and signalling processes? Biochem. Soc. Trans. 34: 389-391.

CHROMOSOMAL LOCATION

Genetic locus: OSBPL9 (human) mapping to 1p32.3; Osbpl9 (mouse) mapping to 4 C7.

SOURCE

ORP-9 (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ORP-9 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-109743 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ORP-9 (I-12) is recommended for detection of ORP-9 of mouse 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).

Suitable for use as control antibody for ORP-9 siRNA (h): sc-88095, ORP-9 siRNA (m): sc-106336, ORP-9 shRNA Plasmid (h): sc-88095-SH, ORP-9 shRNA Plasmid (m): sc-106336-SH, ORP-9 shRNA (h) Lentiviral Particles: sc-88095-V and ORP-9 shRNA (m) Lentiviral Particles: sc-106336-V.

Molecular Weight (predicted) of ORP-9: 83 kDa.

Molecular Weight (observed) of ORP-9: 95 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) Immunofluo-rescence: 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, **D0 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 Satisfation Guaranteed

Try **ORP-9 (A-7): sc-398961**, our highly recommended monoclonal alternative to ORP-9 (I-12).