

ORP-11 (N-14): sc-103101

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. The gene encoding the 747 amino acid ORP-11 (oxysterol-binding protein-related protein 11) protein maps to human chromosome 3, which spans 200 million base pairs and encodes between 1,100 and 1,500 genes.

REFERENCES

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- Lehto, M., et al. 2001. The OSBP-related protein family in humans. *J. Lipid Res.* 42: 1203-1213.
- Annis, A.M., et al. 2002. An oxysterol-binding protein family identified in the mouse. *DNA Cell Biol.* 21: 571-580.
- Lehto, M., et al. 2003. The OSBP-related proteins: a novel protein family involved in vesicle transport, cellular lipid metabolism, and cell signalling. *Biochim. Biophys. Acta* 1631: 1-11.
- Oikkonen, V.M., et al. 2004. Oxysterol binding proteins: in more than one place at one time? *Biochem. Cell Biol.* 82: 87-98.
- Skirpan, A.L., et al. 2006. Identification and characterization of PiORP1, a *Petunia* oxysterol-binding-protein related protein involved in receptor-kinase mediated signaling in pollen, and analysis of the ORP gene family in *Arabidopsis*. *Plant Mol. Biol.* 61: 553-565.

CHROMOSOMAL LOCATION

Genetic locus: OSBPL11 (human) mapping to 3q21.2; Osbpl11 (mouse) mapping to 16 B3.

SOURCE

ORP-11 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ORP-11 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-103101 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ORP-11 (N-14) is recommended for detection of ORP-11 of mouse, rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ORP family members.

ORP-11 (N-14) is also recommended for detection of ORP-11 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ORP-11 siRNA (h): sc-78115, ORP-11 siRNA (m): sc-151319, ORP-11 shRNA Plasmid (h): sc-78115-SH, ORP-11 shRNA Plasmid (m): sc-151319-SH, ORP-11 shRNA (h) Lentiviral Particles: sc-78115-V and ORP-11 shRNA (m) Lentiviral Particles: sc-151319-V.

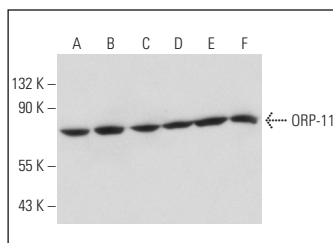
Molecular Weight of ORP-11: 84 kDa.

Positive Controls: JAR cell lysate: sc-2276, NIH/3T3 whole cell lysate: sc-2210 or RPE-J cell lysate: sc-24771

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ORP-11 (N-14): sc-103101. Western blot analysis of ORP-11 expression in HeLa (A), NIH/3T3 (B), JAR (C), RPE-J (D) and IMR-32 (E) whole cell lysates and mouse brain tissue extract (F).

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.