

ORP-9 (A-7): sc-398961



The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: OSBPL9 (human) mapping to 1p32.3; Osbp19 (mouse) mapping to 4 C7.

SOURCE

ORP-9 (A-7) is a mouse monoclonal antibody raised against amino acids 228-379 mapping within an internal region of ORP-9 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ORP-9 (A-7) is available conjugated to agarose (sc-398961 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398961 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398961 PE), fluorescein (sc-398961 FITC), Alexa Fluor® 488 (sc-398961 AF488), Alexa Fluor® 546 (sc-398961 AF546), Alexa Fluor® 594 (sc-398961 AF594) or Alexa Fluor® 647 (sc-398961 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398961 AF680) or Alexa Fluor® 790 (sc-398961 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

ORP-9 (A-7) is recommended for detection of ORP-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

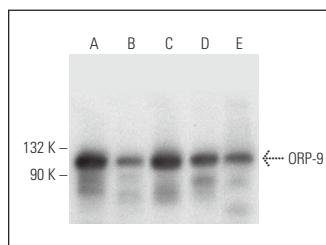
Molecular Weight (observed) of ORP-9: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

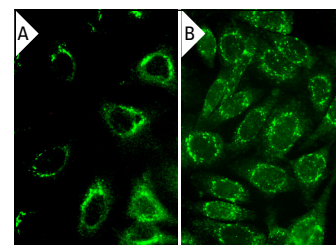
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ORP-9 (A-7): sc-398961. Western blot analysis of ORP-9 expression in HeLa (A), Hep G2 (B), K-562 (C) and Jurkat (D) whole cell lysates and human testis tissue extract (E).



ORP-9 (A-7): sc-398961. Immunofluorescence staining of methanol-fixed HeLa (A) and SW480 (B) cells showing Golgi apparatus localization.

SELECT PRODUCT CITATIONS

- Adams, A. and Vogl, W. 2020. Knockdown of IP3R1 disrupts TBC-ER contact sites and the morphology of apical processes encapsulating late spermatids. *Biol. Reprod.* 103: 669-680.
- Adams, A. and Vogl, W. 2020. ORP-9 knockdown delays the maturation of junction related endocytic structures in the testis and leads to impaired sperm release. *Biol. Reprod.* 103: 1314-1323.
- Palia, P., et al. 2021. Cortactin knockdown results in disruption of basal TBCs and alters turnover of Sertoli cell ESs in *Rattus norvegicus*. *Biol. Reprod.* 105: 1330-1343.
- Tan, J.X. and Finkel, T. 2022. A phosphoinositide signalling pathway mediates rapid lysosomal repair. *Nature* 609: 815-821.
- Bussi, C., et al. 2023. Stress granules plug and stabilize damaged endolysosomal membranes. *Nature* 623: 1062-1069.

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 for detailed protocols and support products.

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