

Phocein (38): sc-136477

BACKGROUND

Phocein (preimplantation protein 3, Mps1 binder kinase activator-like 3, 2C4D) is a 225 amino acid protein encoded by the human gene MOBKL3. Phocein belongs to the MOB1/Phocein family and is phosphorylated on serine residues. Phocein is a widely expressed, highly conserved intracellular protein. The sequence of Phocein has limited homology to the α subunits from clathrin adaptor complexes and contains an additional stretch bearing a putative SH3-binding domain. Phocein is usually associated with membranes but can be present in the cytosol, where it behaves as a protein complex. Phocein is the major partner of the striatin family members, which are scaffolding proteins involved in signaling and trafficking. Due to its association with Dynamin via direct interactions with nucleotide diphosphate kinase (NDPK) and Eps15, Phocein has been implicated in vesicular trafficking, acting in particular in the endocytic process.

REFERENCES

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- Blondeau, C., Gaillard, S., Ternaux, J.P., Monneron, A. and Baude, A. 2003. Expression and distribution of Phocein and members of the striatin family in neurones of rat peripheral ganglia. *Histochem. Cell Biol.* 119: 131-138.
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CHROMOSOMAL LOCATION

Genetic locus: MOBKL3 (human) mapping to 2q33.1; Mobkl3 (mouse) mapping to 1 C1.2.

SOURCE

Phocein (38) is a mouse monoclonal antibody raised against amino acids 1-98 of Phocein of rat origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Phocein (38) is recommended for detection of Phocein of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Phocein siRNA (h): sc-76123, Phocein siRNA (m): sc-76124, Phocein shRNA Plasmid (h): sc-76123-SH, Phocein shRNA Plasmid (m): sc-76124-SH, Phocein shRNA (h) Lentiviral Particles: sc-76123-V and Phocein shRNA (m) Lentiviral Particles: sc-76124-V.

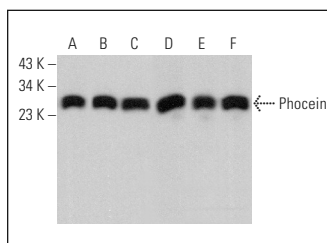
Molecular Weight of Phocein: 26 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, IMR-32 cell lysate: sc-2409 or RT-4 whole cell lysate: sc-364257.

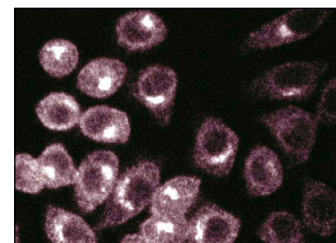
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Phocein (38): sc-136477. Western blot analysis of Phocein expression in IMR-32 (A), Neuro-2A (B) and RT-4 (C) whole cell lysates and rat cerebellum (D), human cerebellum (E) and mouse cerebellum (F) tissue extracts.



Phocein (38): sc-136477. Immunofluorescence staining of HeLa cells showing cytoplasmic localization.

STORAGE

Store at 4° C, **DO 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. Not for resale.

PROTOCOLS

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