**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 σ 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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Phocein (E-6) is a mouse monoclonal antibody raised against amino acids 1-225 representing full length Phocein of human origin.

**PRODUCT**

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

**STORAGE**

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

**APPLICATIONS**

Phocein (E-6) is recommended for detection of Phocein 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).

Phocein (E-6) is also recommended for detection of Phocein in additional species, including canine, bovine and porcine.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG_kappa BP-HRP: sc-516102 or m-IgG_kappa BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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-2038 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG_kappa BP-RTIC: sc-516140 or m-IgG_kappa BP-P: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Phocein (E-6): sc-165980. Western blot analysis of Phocein expression in JAR (A), PC-12 (B), PC-3 (C), AT3B-1 (D), NIH/3T3 (E) and F9 (F) whole cell lysates.

Phocein (E-6): sc-165980. Western blot analysis of Phocein expression in non-transfected sc-117752 (A) and mouse Phocein transfected sc-122546 (B) 293T whole cell lysates.

**RESEARCH USE**

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

**PROTOCOLS**

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