Technical Data Sheet

Purified Mouse Anti-PITP

Product Information

Material Number: Alternate Name: Size: Concentration: Clone: Immunogen: Isotype: Reactivity:

Target MW: Storage Buffer:

611024

Phosphatidylinositol Transfer Protein 50 μg 250 μg/ml 50/PITP Human PITPα aa. 143-264 Mouse IgG1 QC Testing: Human Tested in Development: Mouse, Rat, Dog 32 kDa Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

PITP (Phosphatidylinositol Transfer Protein) is an abundant cytosolic protein that is required for phospholipase C (PLC) signaling and vesicular trafficking. Mammalian cells contain the two PITP isoforms α and β , which bind to lipids with different affinities. PITP α contains a single lipid-binding site and reversibly binds phosphatidylinositol (PtdIns) and phosphatidylcholine (PC), then transfers them between membrane compartments. PITP α exhibits a much higher affinity for PtdIns than for PC. PITP α and β participate in PLC signaling, mediated by the ability of PITP to deliver PtdIns to the signaling complex containing PI4-Kinase, PIP5-Kinase, and the activated receptor. A retroposon insertion in the murine gene encoding PITP α interferes with RNA accumulation and is thought to be the primary cause of the mouse *vibrator* mutation, a neurodegenerative disorder. Thus, PITP mediates the intracellular transfer of phospholipids, which is central to processes such as PLC signaling, exocytosis, and secretory vesicle formation. More importantly, PITP α and PtdIns signaling pathways, in general, may be critical targets in mammalian neurodegenerative disorders. Due to high homology levels between the PITP α and β isoforms, this antibody may cross react with PITP β .





Western blot analysis of PITP on a human endothelial cell lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-PITP antibody. Immunofluorescence staining of MDCK cells (Canine kidney; ATCC CCL-34).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application

-FF	
Western blot	Routinely Tested
Immunofluorescence	Tested During Development

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Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611450	Human Endothelial Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results. 1.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before 3. discarding to avoid accumulation of potentially explosive deposits in plumbing.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States. 4.

References

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