Technical Data Sheet

Purified Mouse Anti-SHP2

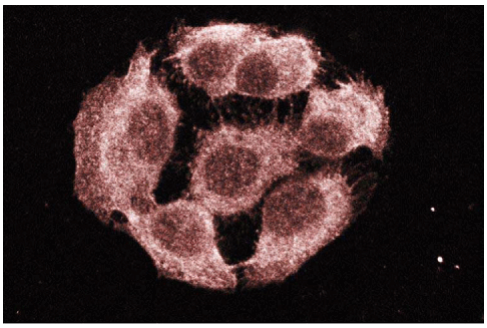
Product Information

Material Number:	**610621**
Alternate Name:	PTP1D, Syp, SHPTP2 and PTP2C
Size:	50 µg
Concentration:	250 µg/ml
Clone:	79/PTP1D/SHP2
Immunogen:	Human PTP1D (SHP2) aa. 1-177
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog, Chicken, Frog
Target MW:	65-72 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

SHP2 (also known as PTP1D, Syp, SHPTP2 and PTP2C) is a member of the cytosolic class of protein-tyrosine phosphatases (PTPs). SHP2 has been reported to contain two SH2 domains where both SH2 domains are N-terminal to the PTP catalytic domain. The expression of SHP2 has been reported to be highest in brain, heart, and kidney. The PTPs are thought to function with other protein-tyrosine kinases to maintain intracellular protein phosphotyrosine homeostasis and cell cycle progression. The presence of SH2 domains in SHP2 (PTP1D) has prompted speculation that binding to specific phosphorylated tyrosine residues is key to its function. SHP2 (PTP1D) is tyrosine- phosphorylated and activated in response to stimulation with EGF or PDGF.

Western blot analysis of SHP2 (PTP1D) on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). *Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10,000 dilultion of the mouse anti- SHP2 (PTP1D) antibody. SHP2 has been reported to be observable in a range between 65-72 kD.*



Immunofluorescence staining of A431 cells (Human epithelial carcinoma; ATCC CRL-1555).

Preparation and Storage

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

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Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development
Immunofluorescence	Tested During Development
Immunohistochemistry	Not Recommended

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
611451	Jurkat 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

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

References

Duchene J, Schanstra JP, Pecher C. A novel protein-protein interaction between a G protein-coupled receptor and the phosphatase SHP-2 is involved in bradykinin-induced inhibition of cell proliferation. *J Biol Chem.* 2002; 277(43):40375-40383.(Biology: Immunoprecipitation, Western blot)

Freeman RM, Plutzky J, Neel BG. Identification of a human src homology 2-containing protein-tyrosine-phosphatase: a putative homolog of Drosophila corkscrew. *Proc Natl Acad Sci U S A.* 1992; 89(23):11239-11243.(Biology)

Kabat J, Borrego F, Brooks A, Coligan JE. Role that each NKG2A immunoreceptor tyrosine-based inhibitory motif plays in mediating the human CD94/NKG2A inhibitory signal. *J Immunol.* 2002; 169(4):1948-1958.(Biology: Immunofluorescence)

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Vogel W, Lammers R, Huang J, Ullrich A. Activation of a phosphotyrosine phosphatase by tyrosine phosphorylation. *Science.* 1993; 259(5101):1611-1614. (Biology)