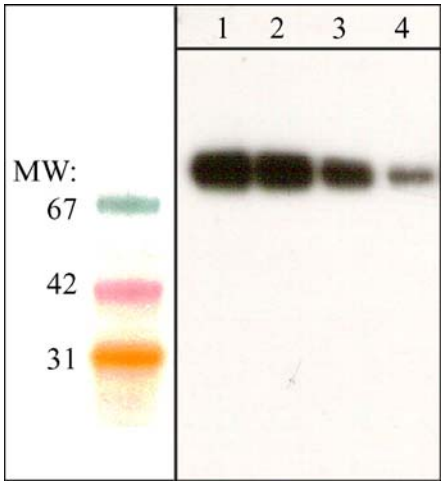
Anti-SHP2 (N-terminal region)

Cat. #	**SM1631**
Host	**Mouse Monoclonal IgG1**
Size	**100µl**

Background:
SHP2 (PTP1D, SH-PTP2, or Syp) is a widely expressed protein-tyrosine phosphatase (PTP) that maintains phosphotyrosine homeostasis during growth factor, cytokine, hormone and antigen receptor signaling. This phosphatase contains two N-terminal SH2 domains and a C-terminal phosphatase domain. SHP2 associates with EGF and PDGF growth factor receptors and is activated after stimulation of these receptors. Activation of SHP-2 and its association with Gab1 is critical for sustained ERK activation downstream of both growth factor and cytokine receptors. In addition to its role in Gab1-mediated Erk activation, SHP-2 attenuates EGF-dependent PI3 kinase activation by dephosphorylating Gab1 p85 binding sites. Thus, SHP2 is critical for maintaining phosphotyrosine homeostasis in many cell signaling pathways.



Western blot analysis of adult mouse brain. The blot was probed with anti-SHP2 (N-terminal) antibody at 1:250 (lane 1), 1:500 (lane 2), 1:1000 (lane 3), and 1:2000 (lane 4).

References:
Qu, C.K. (2000) Cell Res. 10:279.
Maroun, C. R. et al. (2000) Mol. Cell. Biol. 20:8513.
Zhang, S. Q. et al. (2002) Mol. Cell. Biol. 22:4062.

Immunogen:
Clone (M163) was generated from a recombinant protein containing amino acids in the N-terminal region of human SHP1. This sequence is highly conserved in rat and mouse SHP1.

Buffer and Storage:
Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at –20°C. Do not aliquot. Stable for 1 year.

Applications:

Western blotting	1:1000 dilution†
ELISA	1:2000 dilution

End user should determine optimal dilution for their particular applications and experiments.
†Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1hour at room temperature.

Specificity:
The antibody detects a 72 kDa* protein in human A431 and Jurkat cells, and mouse brain. This antibody does not cross-react with SHP1.
*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

Related Products:
SP1571 SHP1 (Tyr-536), phospho-specific Rabbit Polyclonal
SP1531 SHP1 (Ser-591), phospho-specific Rabbit Polyclonal
SM1601 SHP1 (C-terminal region) Mouse Monoclonal

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Rev 08/06