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Anti-SHP1 (Ser-591), Phosphospecific Antibody

Catalog # AN1955

Product Information

Application	WB
Primary Accession	P29350
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	67561

Additional Information

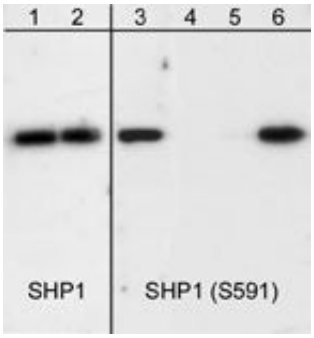
Gene ID	5777
Other Names	PTP1C, SHPTP1
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-SHP1 (Ser-591), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

SHP1 (PTP1C, SH-PTP1, or HCP) is a protein-tyrosine phosphatase (PTP) involved in cell migration, cell proliferation, and immune cell function. This phosphatase contains two N-terminal SH2 domains and a C-terminal phosphatase domain. SHP1 associates with a variety of cytokine and growth factor receptors and regulates signal transduction through dephosphorylation of these receptors or their downstream effectors. Downstream of receptor activation, SHP1 regulates the transcriptional activity stimulated by JAK/Stat and MAPK pathways. SHP1 activity is regulated by both tyrosine and serine phosphorylation. Phosphorylation of Tyr-536 and Tyr-564 stimulates phosphatase activity and promotes interaction with Grb-2. Serine phosphorylation at Ser-591 is mediated by PKCα and leads to inhibition of phosphatase activity. Thus, phosphorylation at tyrosine relative to serine residues may be regulated by different cell signaling pathways to control SHP1 activity.

Images

Western blot analysis of human Jurkat cells treated with pervanadate (1 mM) for 30 min. The blot was exposed to lambda phosphatase (lanes 2 & 4) then probed with anti-SHP1 (C-terminal) antibody (lanes 1 & 2) or anti-SHP1 (Ser-591) antibody (lanes 3-6). The SHP1 (Ser-591)



antibody was used in the presence of phospho-SHP1 (Ser-591) peptide (lane 5) or a non-specific phospho-serine peptide (lane 6).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.