

For Research Use Only

Phospho-SHP1 (Tyr564) Recombinant monoclonal antibody

Catalog Number: 88263-1-RR



Basic Information

Catalog Number: 88263-1-RR	GenBank Accession Number: BC002523	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5777	CloneNo.: 260672B6
Source: Rabbit	UNIPROT ID: P29350	Recommended Dilutions: WB: 1:500-1:2000
Isotype: IgG	Full Name: protein tyrosine phosphatase, non-receptor type 6	
	Calculated MW: 597 aa, 68 kDa	
	Observed MW: 68 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : pervanadate treated Jurkat cells,
Species Specificity: human	

Background Information

Phospho-SHP1 (Tyr564) is the activated tyrosine-phosphorylated form of SHP1 (PTPN6), a hematopoietic-specific non-receptor protein tyrosine phosphatase. This C-terminal Tyr564 residue is phosphorylated primarily by Lyn and other Src-family kinases upon cytokine or immune receptor stimulation. The modification triggers intramolecular binding with SHP1's C-SH2 domain, relieving autoinhibition and boosting catalytic phosphatase activity. It targets STAT5, IL-3R β and EPOR to restrain proliferative and inflammatory signaling in myeloid and lymphoid cells. Loss of Tyr564 phosphorylation causes persistent STAT5 hyperactivation, driving myeloproliferative neoplasms such as CMML. It acts as a vital negative immune checkpoint, linking its abundance to leukemia progression and autoimmune inflammatory disorders. (PMID: 20858858, 38203502)

Storage

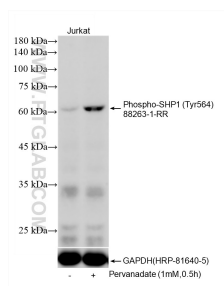
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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Selected Validation Data



Non-treated Jurkat cells and pervanadate treated Jurkat cells were subjected to SDS PAGE followed by western blot with 88263-1-RR (Phospho-SHP1 (Tyr564) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (HRP-80762) antibody as a loading control.