

AB-PP509

PTP1B-pS50 Antibody

Phosphosite-specific rabbit polyclonal antibody for PTPN1 (PTP1B)



KINEXUS

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Target Protein

Protein Name Long:	Tyrosine-protein phosphatase non-receptor type 1
Protein Alias:	CPTP1; EC 3.1.3.48; HA2; Protein tyrosine phosphatase, non-receptor type 1; Protein-protein-tyrosine phosphatase HA2; Protein-tyrosine phosphatase 1B; Protein-tyrosine phosphatase, non-receptor type 1; PTN1; PTP-1B; PTP-HA2; PTPN1
UniProt ID:	P18031
Protein Molecular Mass:	49,967 Da (435 AA)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human PTP1B
Antibody Immunogen Sequence:	RDV(pS)PFD(βA)C
Antibody Immunogen Description:	Corresponds to amino acid residues R47 to D53. S50 phosphorylation stimulates phosphatase activity and protein interaction inhibition. This is one of the major sites of <i>in vivo</i> phosphorylation of PTPN1 (≥30 reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). This particular human phosphosite is highly conserved in vertebrates and also found in the frog. PTPN1 is known to be phosphorylated at this site <i>in vitro</i> by Akt1 (PKBa), Akt2 (PKBb), Akt3 (PKBg), CLK1, and CLK2.
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	The immunizing peptide was produced by solid phase synthesis on a multi-peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
Amount:	25 µg
Antibody Concentration:	0.18 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerosal
Storage Conditions:	For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human Chimpanzee Rhesus macaque Dog Rat Mouse Chicken Frog

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987