

Anti-SHPTP2 (pY542) Antibody

Rabbit polyclonal antibody to SHPTP2 (pY542)
Catalog # AP60046

Product Information

Application	WB, IHC
Primary Accession	Q06124
Other Accession	P35235
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Chicken, Bovine, Dog, SARS
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68011

Additional Information

Gene ID	5781
Other Names	PTP2C; SHPTP2; Tyrosine-protein phosphatase non-receptor type 11; Protein-tyrosine phosphatase 1D; PTP-1D; Protein-tyrosine phosphatase 2C; PTP-2C; SH-PTP2; SHP-2; Shp2; SH-PTP3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human SHPTP2 (pY542). The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

Name	PTPN11
Synonyms	PTP2C, SHPTP2
Function	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed: 10655584 , PubMed: 14739280 , PubMed: 18559669 , PubMed: 18829466 , PubMed: 26742426 , PubMed: 28074573 , PubMed: 32184441). Positively regulates MAPK signal transduction pathway (PubMed: 28074573). Dephosphorylates GAB1, ARHGAP35 and EGFR (PubMed: 28074573). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (PubMed: 18559669). Dephosphorylates CDC73 (PubMed: 26742426). Dephosphorylates SOX9 on

tyrosine residues, leading to inactivate SOX9 and promote ossification (By similarity). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (PubMed:[19275884](#)). Acts as an effector of PDCD1-mediated inhibition of T-cell response: recruited by phosphorylated PDCD1, mediating dephosphorylation of key T-cell receptor (TCR) proximal signaling molecules, leading to TCR signaling inhibition (PubMed:[32184441](#)).

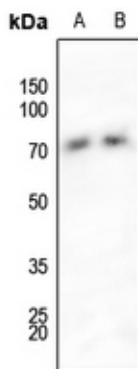
Cellular Location Cytoplasm. Nucleus

Tissue Location Widely expressed, with highest levels in heart, brain, and skeletal muscle.

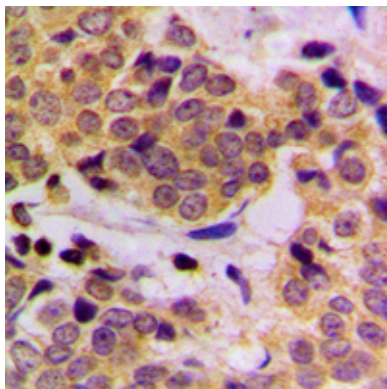
Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human SHPTP2 (pY542). The exact sequence is proprietary.

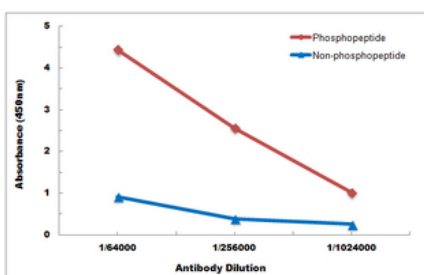
Images



Western blot analysis of SHPTP2 (pY542) expression in LOVO (A), C6 (B) whole cell lysates.



Immunohistochemical analysis of SHPTP2 (pY542) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Direct ELISA antibody dose-response curve using Anti-SHPTP2 (pY542) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

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