

# SH-PTP2 (phospho Tyr580) Polyclonal Antibody

Catalog # AP67514

## Product Information

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<b>Application</b>	WB, IHC-P, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q06124</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	68011

## Additional Information

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<b>Gene ID</b>	5781
<b>Other Names</b>	PTPN11; 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
<b>Dilution</b>	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	PTPN11
<b>Synonyms</b>	PTP2C, SHPTP2
<b>Function</b>	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed: <a href="#">10655584</a> , PubMed: <a href="#">14739280</a> , PubMed: <a href="#">18559669</a> , PubMed: <a href="#">18829466</a> , PubMed: <a href="#">26742426</a> , PubMed: <a href="#">28074573</a> , PubMed: <a href="#">32184441</a> ). Positively regulates MAPK signal transduction pathway (PubMed: <a href="#">28074573</a> ). Dephosphorylates GAB1, ARHGAP35 and EGFR (PubMed: <a href="#">28074573</a> ). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (PubMed: <a href="#">18559669</a> ). Dephosphorylates CDC73 (PubMed: <a href="#">26742426</a> ). Dephosphorylates SOX9 on tyrosine residues, leading to inactivate SOX9 and promote ossification (By similarity). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (PubMed: <a href="#">19275884</a> ). 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.

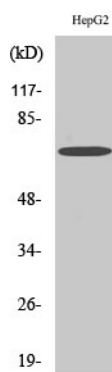
## Background

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Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. 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. Dephosphorylates CDC73 (PubMed:[26742426](#)).

## Images

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Western Blot analysis of various cells using Phospho-SH-PTP2 (Y580) Polyclonal Antibody

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