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KD-Validated Anti-PTPN11 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1274

Product Information

Application	WB, FC, ICC
Primary Accession	Q06124
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB2670
Calculated MW	68011
Gene Name	PTPN11
Aliases	PTPN11; Protein Tyrosine Phosphatase Non-Receptor Type 11; SH-PTP2; PTP2C; BPTP3; SHP-2; SHP2; SH2 Domain-Containing Protein Tyrosine Phosphatase 2; Tyrosine-Protein Phosphatase Non-Receptor Type 11; Protein-Tyrosine Phosphatase 1D; Protein-Tyrosine Phosphatase 2C; EC 3.1.3.48; SH-PTP3; PTP-1D; NS1; Protein Tyrosine Phosphatase, Non-Receptor Type 11; Noonan Syndrome 1; METCDS; SHPTP2; PTP-2C; JMML; Shp2; CFC
Immunogen	A synthesized peptide derived from human SHP2

Additional Information

Gene ID	5781
Other Names	Tyrosine-protein phosphatase non-receptor type 11, 3.1.3.48, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3, PTPN11, PTP2C, SHPTP2

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.

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