

RecomAb™

PTPN1 recombinant monoclonal antibody, clone R05-3B9

Catalog # RAB01973 Size 100 uL

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PTPN1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human PTPN1.
Theoretical MW (kDa)	Calculated MW: 50 kD
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunofluorescence (1:50-1:200) Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at -20 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Immunohistochemistry

- Immunofluorescence

Gene Info — PTPN1

Entrez GeneID	5770
Protein Accession#	P18031
Gene Name	PTPN1
Gene Alias	PTP1B
Gene Description	protein tyrosine phosphatase, non-receptor type 1
Omim ID	176885 609830
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation. [provided by RefSeq]
Other Designations	OTTHUMP00000031266 non-receptor tyrosine phosphatase 1 protein tyrosine phosphatase 1B protein tyrosine phosphatase, placental

Pathway

- [Adherens junction](#)
- [Insulin signaling pathway](#)

Disease

- [Albuminuria](#)
- [Alzheimer disease](#)

- [Arteriosclerosis](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Calcinosis](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cerebrovascular Disorders](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Retinopathy](#)
- [Dyslipidemias](#)
- [Genetic Predisposition to Disease](#)
- [Glucose Intolerance](#)
- [Helicobacter Infections](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Noonan Syndrome](#)
- [Obesity](#)

- [Osteoporosis](#)
- [Ovarian Neoplasms](#)
- [Peripheral Vascular Diseases](#)
- [Pulmonary Valve Stenosis](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)