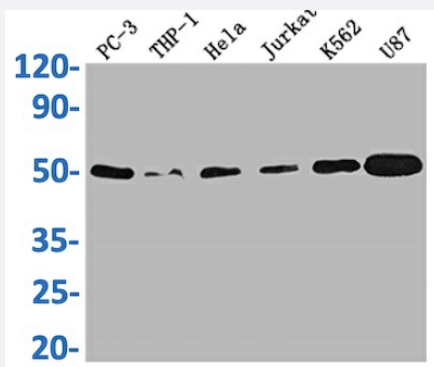


RecomAb™

PTPN1 recombinant monoclonal antibody, clone 1G3

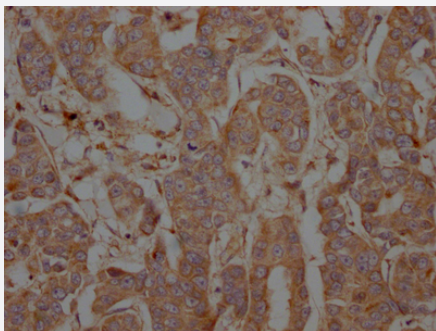
Catalog # RAB04041 Size 100 uL

Applications



Western Blot

Western Blot analysis of Lane 1: PC-3 whole cell lysate; Lane 2: THP-1 whole cell lysate; Lane 3: HeLa whole cell lysate; Lane 4: Jurkat whole cell lysate; Lane 5: K562 whole cell lysate; Lane 6: U87 whole cell lysate.



Immunohistochemistry

Immunohistochemistry image of PTPN1 recombinant monoclonal antibody, clone 1G3 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PTPN1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein corresponding to full length human PTPN1.
Reactivity	Human
Form	Liquid
Purification	Affinity-chromatography

Isotype	IgG
Recommend Usage	ELISA Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °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

Western Blot analysis of Lane 1: PC-3 whole cell lysate; Lane 2: THP-1 whole cell lysate; Lane 3: Hela whole cell lysate; Lane 4: Jurkat whole cell lysate; Lane 5: K562 whole cell lysate; Lane 6: U87 whole cell lysate.

- Immunohistochemistry

Immunohistochemistry image of PTPN1 recombinant monoclonal antibody, clone 1G3 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system.

- Enzyme-linked Immunoabsorbent Assay

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](#)