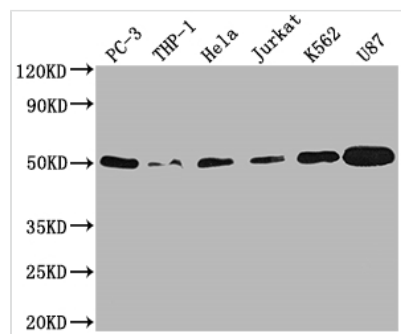




PTPN1 Antibody

Product Code	CSB-RA272100A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P18031
Immunogen	A synthesized peptide derived from human PTP1B
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Tyrosine-protein phosphatase which acts as a regulator of endoplasmic reticulum unfolded protein response. Mediates dephosphorylation of EIF2AK3/PERK; inactivating the protein kinase activity of EIF2AK3/PERK. May play an important role in CKII- and p60c-src-induced signal transduction cascades. May regulate the EFNA5-EPHA3 signaling pathway which modulates cell reorganization and cell-cell repulsion. May also regulate the hepatocyte growth factor receptor signaling pathway through dephosphorylation of MET.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular; Signal transduction
Gene Names	PTPN1
Accession NO.	1G3

Image



Western Blot

Positive WB detected in: PC-3 whole cell lysate, THP-1 whole cell lysate, HeLa whole cell lysate, Jurkat whole cell lysate, K562 whole cell lysate, U87 whole cell lysate

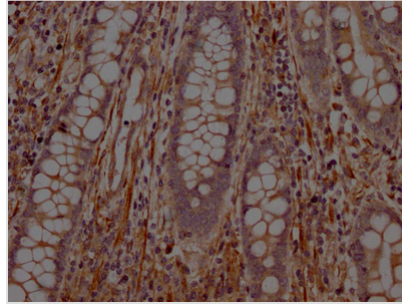
All lanes: PTPN1 antibody at 1:2000

Secondary

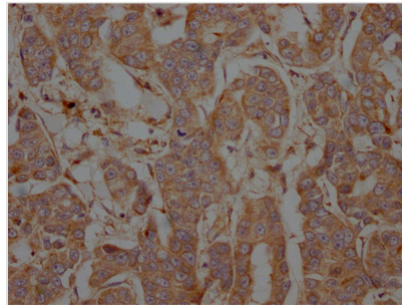
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 50 kDa

Observed band size: 50 kDa



IHC image of CSB-RA272100A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA272100A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

PTPN1, also known as PTP1B, is a master negative modulator of the insulin and leptin signaling pathway. PTP1B participates in regulating glucose homeostasis, energy consumption, cell proliferation, and immunity. Inhibition of PTP1B can therefore protect against obesity and diabetes. PTP1B is also involved in tumor progression in multiple cancer types. PTP1B functions either as a tumor suppressor or a tumor promoter depending on the cancer type. PTP1B overexpression drives the pathogenesis of breast cancers, while its deficiency enhances the invasiveness of prostate cancer.

The recombinant PTPN1 antibody was produced by cloning antibody genes into an expression vectors, which were subsequently introduced into mammalian cells to provide animal-free antibody production. This PTPN1 antibody has been validated in ELISA, WB, IHC. It has the features of improved affinity, stability, and consistency between different batches.