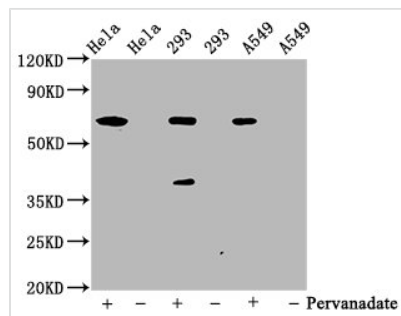




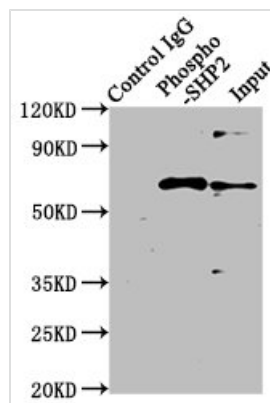
Phospho-PTPN11 (Y542) Recombinant Monoclonal Antibody

Product Code	CSB-RA019025A542phHU
Abbreviation	Tyrosine-protein phosphatase non-receptor type 11
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q06124
Immunogen	A synthesized peptide derived from Human Phospho-PTPN11 (Y542)
Species Reactivity	Human
Tested Applications	ELISA, WB, IP; Recommended dilution: WB:1:500-1:5000, IP:1:200-1:1000
Relevance	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).
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
Alias	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, PTPN11, PTP2C, SHPTP2
Immunogen Species	Homo sapiens (Human)
Research Area	Signal Transduction
Gene Names	PTPN11
Clone No.	2E2
Image	



Western Blot

Positive WB detected in HeLa whole cell lysate, 293 whole cell lysate, A549 whole cell lysate (treated with Pervanadate or not)
All lanes Phospho-PTPN11 antibody at 0.65µg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 68 KDa
Observed band size: 68 KDa



Immunoprecipitating Phospho-PTPN11 in HeLa whole cell lysate treated with Pervanadate
Lane 1: Rabbit control IgG (1µg) instead of CSB-RA019025A542phHU in HeLa whole cell lysate treated with Pervanadate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)
Lane 2: CSB-RA019025A542phHU (3µg) + HeLa whole cell lysate treated with Pervanadate (1mg)
Lane 3: HeLa whole cell lysate treated with Pervanadate (20µg)

Description

The product CSB-RA019025A542phHU is a recombinant GDNF monoclonal antibody. It was generated by transfecting the human phospho-PTPN11 (Y542) monoclonal antibody gene-vector clones into the cell line for in vitro production and subsequent purification from the tissue culture supernatant (TCS) through affinity-chromatography. This phospho-PTPN11 (Y542) antibody is reactive with human PTPN11 phosphorylated at Y542. And it has been tested for use in multiple applications, including ELISA, WB, and IP.

PTPN11, also known as Shp2, is a widely expressed protein tyrosine phosphatase, and its kinase-induced hyperactivity has been linked to a variety of cancers. RTKs like EPHA2 phosphorylate Y542 and Y580 on PTPN11, which prolongs ERK activation by keeping PTPN11 in an open conformation. According to studies, phosphorylated Y542 interacts intramolecularly with the N-SH2 domain of Shp2 to relieve PTPase basal inhibition, whereas phosphonate at Y580 enhances PTPase activity through interacting with the C-SH2 domain.