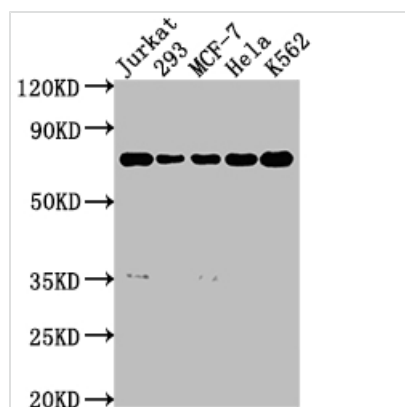




# PTPN11 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA779218A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q06124
<b>Immunogen</b>	A synthesized peptide derived from human SHP2
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB; Recommended dilution: WB:1:500-1:5000
<b>Relevance</b>	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).
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Neuroscience; Signal transduction
<b>Gene Names</b>	PTPN11
<b>Clone No.</b>	7A1

## Image



### Western Blot

Positive WB detected in: Jurkat whole cell lysate, 293 whole cell lysate, MCF-7 whole cell lysate, HeLa whole cell lysate, K562 whole cell lysate  
 All lanes: PTPN11 antibody at 1:2000  
 Secondary  
 Goat polyclonal to rabbit IgG at 1/50000 dilution  
 Predicted band size: 69, 53 kDa  
 Observed band size: 69 kDa

## Description



CUSABIO produced the PTPN11 recombinant monoclonal antibody using protein technology and DNA recombinant technology. Initially, mice were immunized with a synthesized peptide derived from human SHP2, and after a certain period of time, their spleen was removed under aseptic conditions. The total RNA of the spleen cells was extracted, and the cDNA synthesized by RNA reverse transcription was used as a template for PCR amplification of the PTPN11 antibody gene. The obtained gene was then introduced into a vector and transfected into host cells for culture. The PTPN11 recombinant monoclonal antibody was purified from the supernatant of the cell culture using affinity chromatography. This antibody was rigorously verified and can be utilized for detecting human PTPN11 protein in ELISA and WB experiments.

The PTPN11 protein, also known as SHP2, is a signaling protein that acts as a phosphatase. It is involved in several signaling pathways in cells, including growth factor signaling and immune response. SHP2 is also involved in immune signaling by regulating the activity of immune cells. In T cells, SHP2 plays a role in regulating T cell receptor signaling, which is critical for the activation and function of T cells. SHP2 has also been shown to regulate the activity of macrophages and other immune cells. Mutations in the PTPN11 gene can lead to several diseases, including Noonan syndrome, LEOPARD syndrome, and some types of leukemia.