**Product Datasheet**

# PTPN6 Antibody

Catalog No: #32280

Package Size: #32280-1 50ul #32280-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

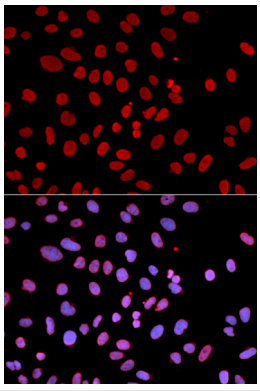
## Description

| | |
|---|---|
| Product Name | PTPN6 Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were purified by affinity purification using immunogen. |
| Applications | WB,IF |
| Species Reactivity | Human,Mouse,Rat |
| Specificity | The antibody detects endogenous level of total PTPN6 protein. |
| Immunogen Type | Recombinant Protein |
| Immunogen Description | Recombinant protein of human PTPN6. |
| Target Name | PTPN6 |
| Other Names | PTPN6; HCP; HCPH; HPTP1C; PTP-1C |
| Accession No. | Swiss-Prot:P29350NCBI Gene ID:5777 |
| Uniprot | P29350 |
| GeneID | 5777; |
| SDS-PAGE MW | 65KD |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

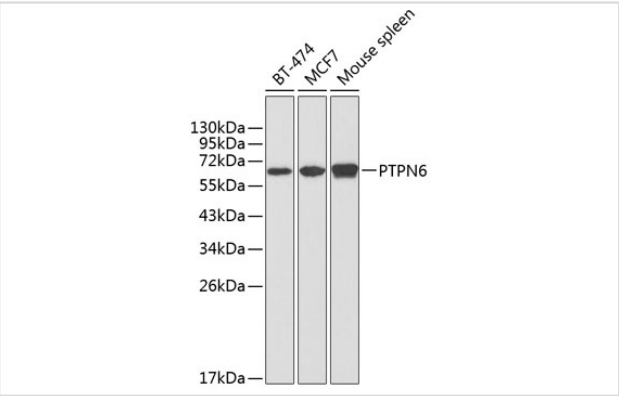
## Application Details

WB□1:500 - 1:2000IF□1:50 - 1:200

## Images



Immunofluorescence analysis of U2OS cells using PTPN6 .
Blue: DAPI for nuclear staining.




Western blot analysis of extracts of various cell lines, using PTPN6 at 1:1000 dilution.

## Background

SHP-1 (PTPN6) is a non-receptor protein tyrosine phosphatase that is expressed primarily in hematopoietic cells. The enzyme is composed of two SH2 domains, a tyrosine phosphatase catalytic domain, and a carboxy-terminal regulatory domain (1). SHP-1 removes phosphates from target proteins to downregulate several tyrosine kinase-regulated pathways. In hematopoietic cells, the amino-terminal SH2 domain of SHP-1 binds to tyrosine phosphorylated erythropoietin receptors (EpoR) to negatively regulate hematopoietic growth (2). Overexpression of SHP-1 in epithelial cells results in dephosphorylation of the Ros receptor tyrosine kinase and subsequent downregulation of Ros-dependent cell proliferation and transformation (3). Following ligand binding in myeloid cells, SHP-1 associates with the IL-3R β chain and downregulates IL-3-induced tyrosine phosphorylation and cell proliferation (4). Because SHP-1 downregulates various proliferation pathways, SHP-1 is considered a potential tumor suppressor and angiogenesis regulator (5,6).

Note: This product is for in vitro research use only