

**SH-PTP2 (phospho Tyr542) Polyclonal Antibody**

<b>Catalog No :</b>	YP0581
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	SH-PTP2
<b>Fields :</b>	>>Ras signaling pathway;>>Phospholipase D signaling pathway;>>Axon guidance;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>Natural killer cell mediated cytotoxicity;>>Leukocyte transendothelial migration;>>Neurotrophin signaling pathway;>>Adipocytokine signaling pathway;>>Insulin resistance;>>Epithelial cell signaling in Helicobacter pylori infection;>>Pathogenic Escherichia coli infection;>>Herpes simplex virus 1 infection;>>Proteoglycans in cancer;>>Chemical carcinogenesis - reactive oxygen species;>>Renal cell carcinoma;>>Chronic myeloid leukemia;>>PD-L1 expression and PD-1 checkpoint pathway in cancer
<b>Gene Name :</b>	PTPN11
<b>Protein Name :</b>	Tyrosine-protein phosphatase non-receptor type 11
<b>Human Gene Id :</b>	5781
<b>Human Swiss Prot No :</b>	Q06124
<b>Mouse Gene Id :</b>	19247
<b>Mouse Swiss Prot No :</b>	P35235
<b>Rat Gene Id :</b>	25622
<b>Rat Swiss Prot No :</b>	P41499
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human SHP-2 around the phosphorylation site of Tyr542. AA range:508-557
<b>Specificity :</b>	Phospho-SH-PTP2 (Y542) Polyclonal Antibody detects endogenous levels of SH-PTP2 protein only when phosphorylated at Y542.

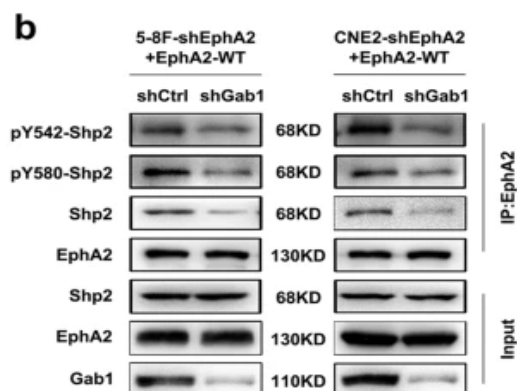
---

<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	70kD
<b>Cell Pathway :</b>	Insulin Receptor; B Cell Receptor; MAPK; Protein_Acetylation
<b>Background :</b>	<p>The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. 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 contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration. Mutations in this gene are a cause of Noonan syndrome as well as acute myeloid leukemia. [provided by RefSeq, Aug 2016],</p>
<b>Function :</b>	<p>catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,disease:Defects in PTPN11 are a cause of juvenile myelomonocytic leukemia (JMML) [MIM:607785]. JMML is a pediatric myelodysplastic syndrome that constitutes approximately 30% of childhood cases of myelodysplastic syndrome (MDS) and 2% of leukemia. It is characterized by leukocytosis with tissue infiltration and in vitro hypersensitivity of myeloid progenitors to granulocyte-macrophage colony stimulating factor.,disease:Defects in PTPN11 are a cause of Noonan-like syndrome [MIM:163955]; also known as Noonan-like/multiple giant cell lesion syndrome. It is an autosomal dominant disorder characterized by Noonan features associates with giant cell lesions of bone and soft tissue.,disease:Defects in PTPN11 are the cause of LEOPARD syndrome [MIM:151100]. It is an autosomal dominant disorder allelic with Noonan</p>
<b>Subcellular Location :</b>	Cytoplasm . Nucleus .
<b>Expression :</b>	Widely expressed, with highest levels in heart, brain, and skeletal muscle.

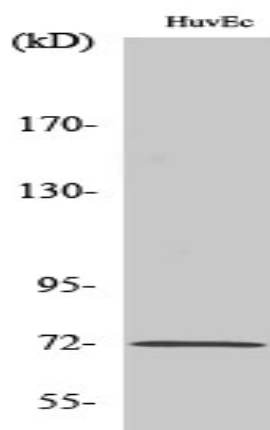
---

<b>Tag :</b>	orthogonal
<b>Sort :</b>	1193
<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Phospho

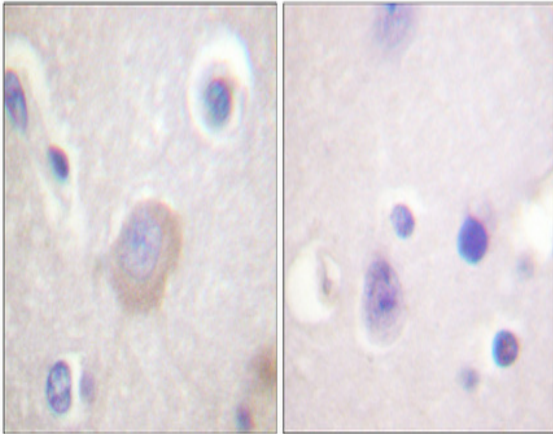
## Products Images



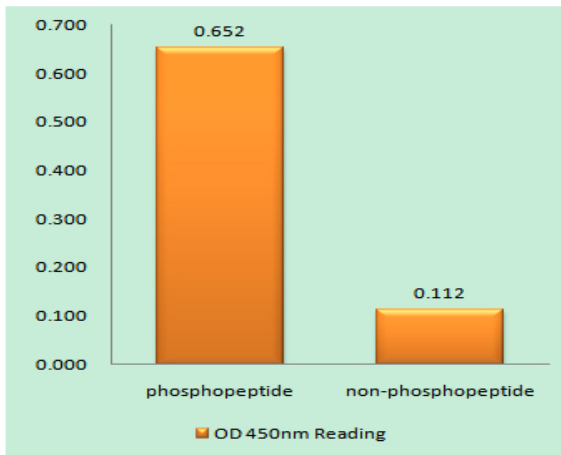
Xiang, YP., Xiao, T., Li, QG. et al. Y772 phosphorylation of EphA2 is responsible for EphA2-dependent NPC nasopharyngeal carcinoma growth by Shp2/Erk-1/2 signaling pathway. *Cell Death Dis* 11, 709 (2020).



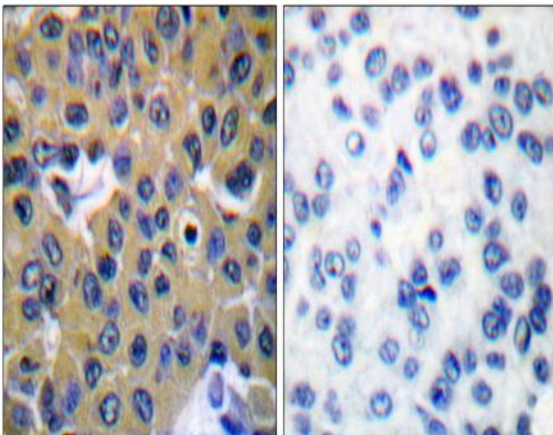
Western Blot analysis of various cells using Phospho-SH-PTP2 (Y542) Polyclonal Antibody diluted at 1:1000



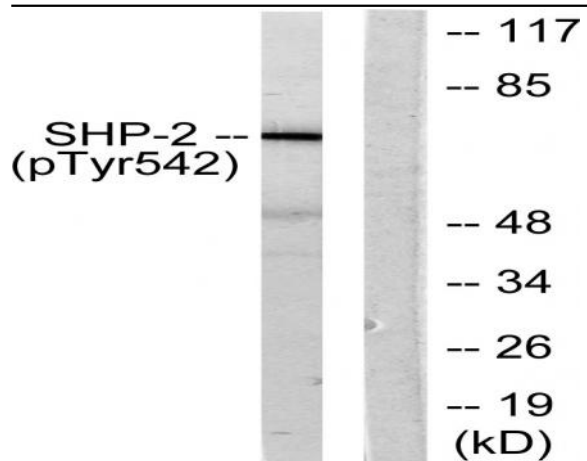
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



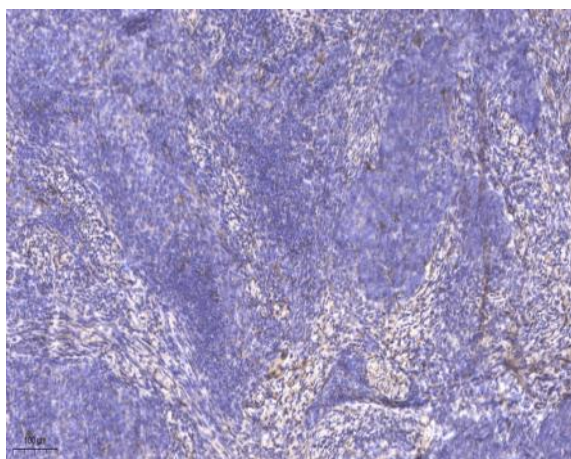
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SHP-2 (Phospho-Tyr542) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using SHP-2 (Phospho-Tyr542) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A431 cells, using SHP-2 (Phospho-Tyr542) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).