

**SH-PTP2 (phospho Tyr580) Polyclonal Antibody**

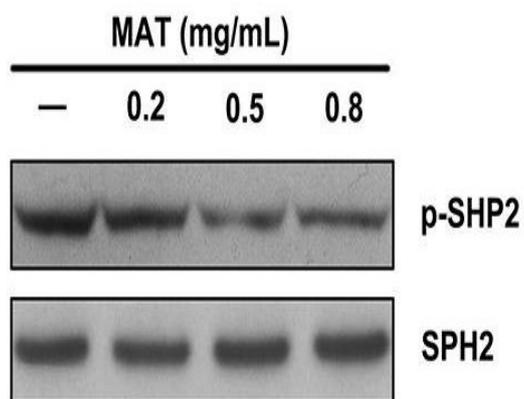
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| <b>Catalog No :</b>          | YP0582                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <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 Tyr580. AA range:546-595                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity :</b>         | Phospho-SH-PTP2 (Y580) Polyclonal Antibody detects endogenous levels of SH-PTP2 protein only when phosphorylated at Y580.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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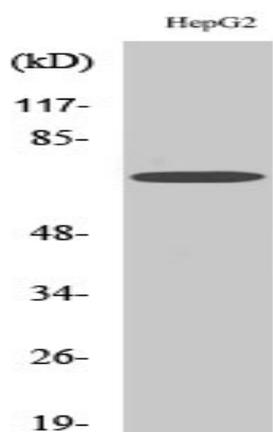
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|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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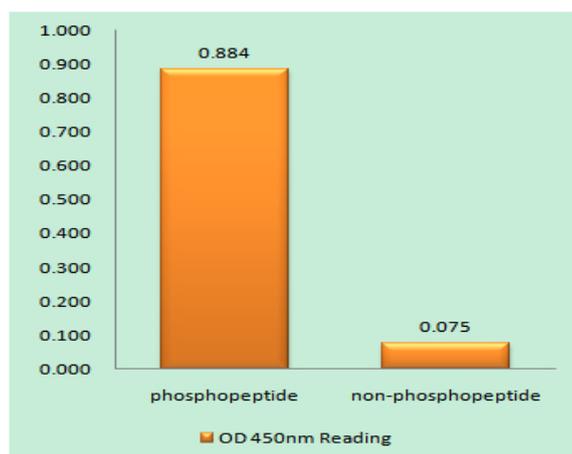
## Products Images



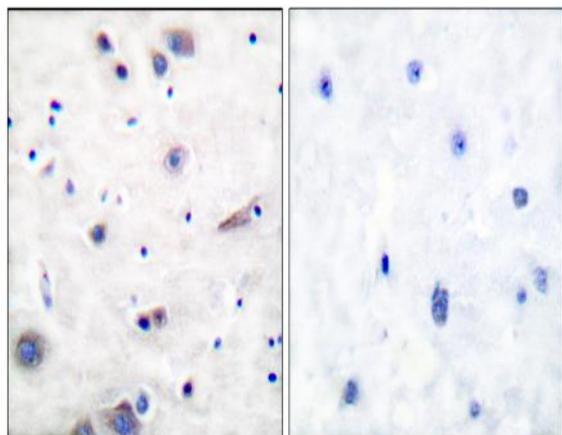
Ma, Lingdi, et al. "Matrine inhibits BCR/ABL mediated ERK/MAPK pathway in human leukemia cells." *Oncotarget* 8.65 (2017): 108880.



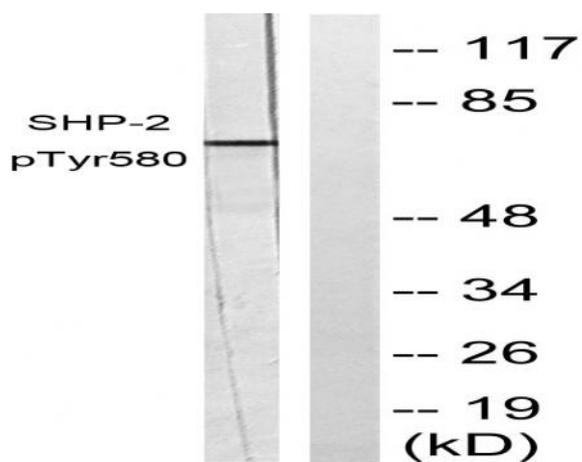
Western Blot analysis of various cells using Phospho-SH-PTP2 (Y580) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SHP-2 (Phospho-Tyr580) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using SHP-2 (Phospho-Tyr580) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A431 cells, using SHP-2 (Phospho-Tyr580) Antibody. The lane on the right is blocked with the phospho peptide.