

SIRP-a1 Polyclonal Antibody

Catalog No: YT4301

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: SHPS1

Fields: >>Osteoclast differentiation

Gene Name: SIRPA

Protein Name: Tyrosine-protein phosphatase non-receptor type substrate 1

Human Gene Id: 140885

Human Swiss Prot

P78324

No:

Mouse Gene ld: 19261

Mouse Swiss Prot

P97797

No:

Rat Gene ld: 25528

Rat Swiss Prot No: P97710

Immunogen: The antiserum was produced against synthesized peptide derived from human

Sirp alpha1. AA range:451-500

Specificity: SIRP-a1 Polyclonal Antibody detects endogenous levels of SIRP-a1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD

Background: The protein encoded by this gene is a member of the signal-regulatory-protein

(SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on

chromosome 20p13. Multiple alternati

Function: function:Immunoglobulin-like cell surface receptor for CD47. Acts as docking

protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled

cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and

inhibits cytokine production by mature dendritic cells., PTM:N-

glycosylated.,PTM:Phosphorylated on tyrosine residues in response to stimulation

with EGF, growth hormone, insulin and PDGF. Dephosphoryla

Subcellular Location:

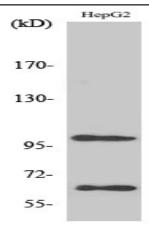
Membrane; Single-pass type I membrane protein.

Expression : Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells.

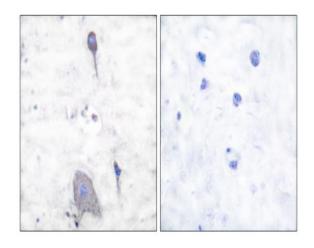
Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small

intestine, prostate, spleen, kidney, skeletal muscle and pancreas.

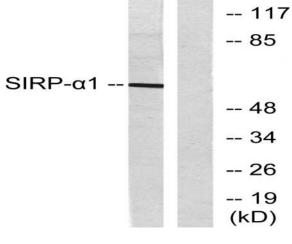
Products Images



Western Blot analysis of various cells using SIRP- $\alpha 1$ Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Sirp alpha1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 cells, using Sirp alpha1 Antibody. The lane on the right is blocked with the synthesized peptide.