



SHIP-2 Polyclonal Antibody

Catalog No	YP-Ab-15042
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	INPPL1
Protein Name	Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human INPPL1. AA range:351-400
Specificity	SHIP-2 Polyclonal Antibody detects endogenous levels of SHIP-2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	INPPL1; SHIP2; Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2; Inositol polyphosphate phosphatase-like protein 1; INPPL-1; Protein 51C; SH2 domain-containing inositol 5'-phosphatase 2; SH2 domain-containing inositol phosphatase 2; SHIP-2
Observed Band	130kD
Cell Pathway	Cytoplasm, cytosol . Cytoplasm, cytoskeleton. Membrane ; Peripheral membrane protein. Cell projection, filopodium . Cell projection, lamellipodium . Nucleus . Nucleus speckle . Translocates to membrane ruffles when activated, translocation is probably due to different mechanisms depending on the stimulus and cell type. Partly translocated via its SH2 domain which mediates interaction with tyrosine phosphorylated receptors such as the FC-gamma-RIIB receptor (FCGR2B). Tyrosine phosphorylation may also participate in membrane localization. Insulin specifically stimulates its redistribution from the cytosol to the plasma membrane. Recruited to the membrane following M-CSF stimulation. In activated spreading platelets, localizes with actin at filopodia, lamellipodia and the central actin ring.
Tissue Specificity	Widely expressed, most prominently in skeletal muscle, heart and brain. Present in platelets. Expressed in transformed myeloid cells and in primary macrophages, but not in peripheral blood monocytes.
Function	catalytic activity:Phosphatidylinositol 3,4,5-trisphosphate + H(2)O = phosphatidylinositol 3,4-bisphosphate + phosphate.,disease:Defects in INPPL1



may be a cause of susceptibility to type 2 diabetes mellitus non-insulin dependent (NIDDM) [MIM:125853].,disease:Genetic variations in INPPL1 may be a cause of susceptibility to metabolic syndrome. Metabolic syndrome is characterized by diabetes, insulin resistance, hypertension, and hypertriglyceridemia is absent.,domain:The NPXY sequence motif found in many tyrosine-phosphorylated proteins is required for the specific binding of the PID domain.,domain:The SH2 domain interacts with tyrosine phosphorylated forms of proteins such as SHC1 or FCGR2A. It also mediates the interaction with p130Cas/BCAR1.,enzyme regulation:Activated upon translocation to the sites of synthesis of PtdIns(3,4,5)P3 in the membrane. Enzymatic activity is enhanced in the

Background

The protein encoded by this gene is an SH2-containing 5'-inositol phosphatase that is involved in the regulation of insulin function. The encoded protein also plays a role in the regulation of epidermal growth factor receptor turnover and actin remodelling. Additionally, this gene supports metastatic growth in breast cancer and is a valuable biomarker for breast cancer. [provided by RefSeq, Jan 2009],

matters needing attention

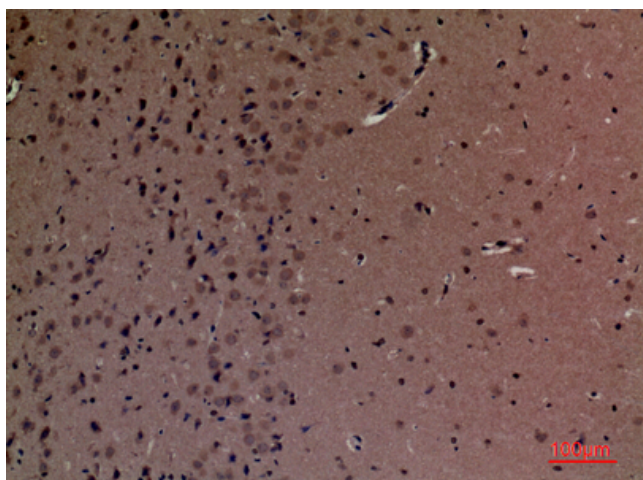
Avoid repeated freezing and thawing!

Usage suggestions

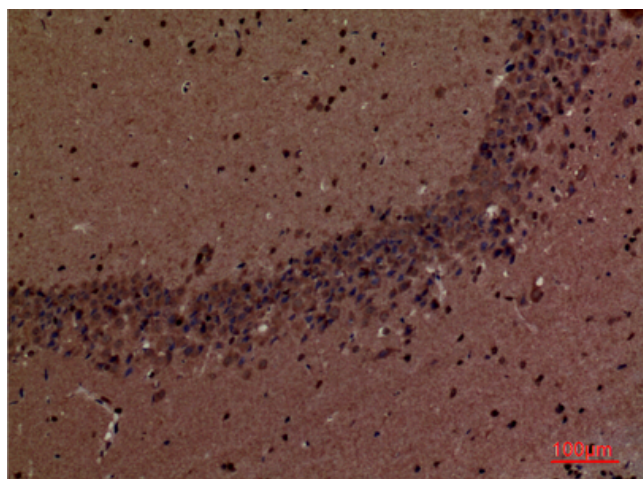
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



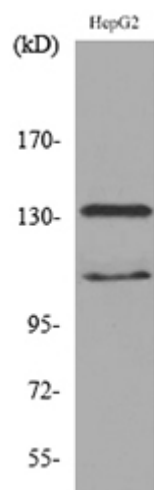
Products Images



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100



Western blot analysis of lysate from HepG2 cells, using INPPL1 Antibody.