

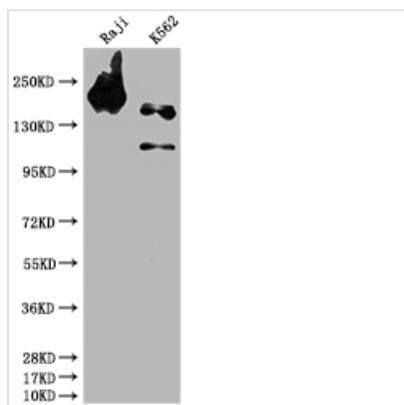


INPP5D Recombinant Monoclonal Antibody

Product Code	CSB-RA157463A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q92835
Immunogen	A synthesized peptide derived from human SHIP
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IP:1:200-1:1000
Relevance	Phosphatidylinositol (PtdIns) phosphatase that specifically hydrolyzes the 5-phosphate of phosphatidylinositol-3,4,5-trisphosphate (PtdIns(3,4,5)P3) to produce PtdIns(3,4)P2, thereby negatively regulating the PI3K (phosphoinositide 3-kinase) pathways. Acts as a negative regulator of B-cell antigen receptor signaling. Mediates signaling from the FC-gamma-RIIB receptor (FCGR2B), playing a central role in terminating signal transduction from activating immune/hematopoietic cell receptor systems. Acts as a negative regulator of myeloid cell proliferation/survival and chemotaxis, mast cell degranulation, immune cells homeostasis, integrin alpha-IIb/beta-3 signaling in platelets and JNK signaling in B-cells. Regulates proliferation of osteoclast precursors, macrophage programming, phagocytosis and activation and is required for endotoxin tolerance. Involved in the control of cell-cell junctions, CD32a signaling in neutrophils and modulation of EGF-induced phospholipase C activity. Key regulator of neutrophil migration, by governing the formation of the leading edge and polarization required for chemotaxis. Modulates FCGR3/CD16-mediated cytotoxicity in NK cells. Mediates the activin/TGF-beta-induced apoptosis through its Smad-dependent expression. May also hydrolyze PtdIns(1,3,4,5)P4, and could thus affect the levels of the higher inositol polyphosphates like InsP6.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology; Signal transduction
Gene Names	INPP5D
Clone No.	9G11



Image



Western Blot

Positive WB detected in: Raji whole cell lysate,
K562 whole cell lysate

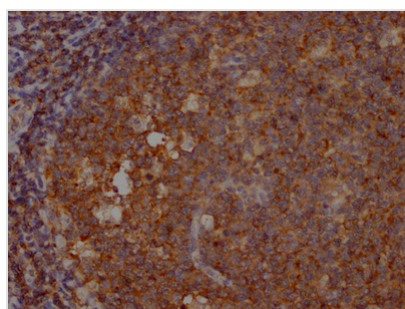
All lanes: INPP5D antibody at 1:1500

Secondary

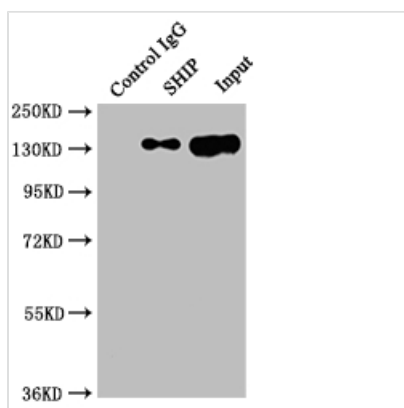
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 134, 110 kDa

Observed band size: 145 kDa



IHC image of CSB-RA157463A0HU diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunoprecipitating SHIP in Raji whole cell lysate

Lane 1: Rabbit control IgG instead of CSB-RA157463A0HU in Raji whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)

Lane 2: CSB-RA157463A0HU(2μg)+ Raji whole cell lysate(500μg)

Lane 3: Raji whole cell lysate (10μg)

Description

The INPP5D recombinant antibody is prepared using protein and DNA recombinant technologies. First, a synthesized peptide derived from human INPP5D is used to immunize mice. After a specific period, the spleen of mice is aseptically removed, and total RNA is extracted from the spleen cells. The extracted RNA is reverse transcribed to cDNA, which is then used as a template for PCR amplification of the INPP5D antibody gene. The INPP5D antibody gene is then cloned into a vector, which is transfected into host cells for culture. The INPP5D recombinant monoclonal antibody is purified from the supernatant of cell culture using affinity chromatography. This antibody undergoes rigorous verification and can be utilized in ELISA, WB, IHC, and IP experiments for the detection of human INPP5D protein.

INPP5D, also known as SHIP-1, is a phosphatase enzyme that plays a key role in regulating intracellular signaling pathways in various cells, including immune



cells.

INPP5D dephosphorylates the PIP3 to generate PIP2, thereby inhibiting downstream signaling events mediated by the PI3K pathway. This negative regulation of PI3K signaling by INPP5D is important for the maintenance of immune cell homeostasis and the prevention of autoimmunity.