

INPP5D Polyclonal antibody

 Catalog Number: 19694-1-AP 5 Publications

Basic Information

Catalog Number:

19694-1-AP

Size:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_001017915

GeneID (NCBI):

3635

UNIPROT ID:

Q92835

Full Name:

inositol polyphosphate-5-phosphatase, 145kDa

Calculated MW:

133 kDa

Observed MW:

145 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : Daudi cells, Ramos cells, Raji cells, THP-1 cells

IP : Ramos cells,

IHC : human tonsillitis tissue,

Background Information

INPP5D, also named as SHIP, SHIP1, SIP-145 and hp51CN, belongs to the inositol-1,4,5-trisphosphate 5-phosphatase family. INPP5D is 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. INPP5D acts as a negative regulator of B-cell antigen receptor signaling. It mediates signaling from the FC-gamma-RIIB receptor (FCGR2B), playing a central role in terminating signal transduction from activating immune/hematopoietic cell receptor systems. INPP5D 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. INPP5D regulates proliferation of osteoclast precursors, macrophage programming, phagocytosis and activation and is required for endotoxin tolerance. It is involved in the control of cell-cell junctions, CD32a signaling in neutrophils and modulation of EGF-induced phospholipase C activity. It is a key regulator of neutrophil migration, by governing the formation of the leading edge and polarization required for chemotaxis. It modulates FCGR3/CD16-mediated cytotoxicity in NK cells. It mediates the activin/TGF-beta-induced apoptosis through its Smad-dependent expression. INPP5D may also hydrolyze PtdIns(1,3,4,5)P₄, and could thus affect the levels of the higher inositol polyphosphates like InsP₆. This antibody is specific to INPP5D.

Notable Publications

Author	Pubmed ID	Journal	Application
Ruriko Suzuki	31339552	Eur J Immunol	WB
Christina E Murray	30029687	Acta Neuropathol Commun	IHC
Qiaofen Fu	30720128	Oncol Rep	WB,IHC

Storage

Storage:

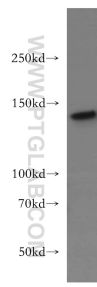
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

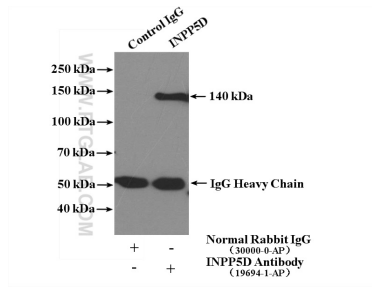
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

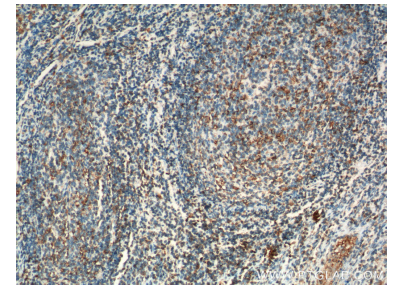
Selected Validation Data



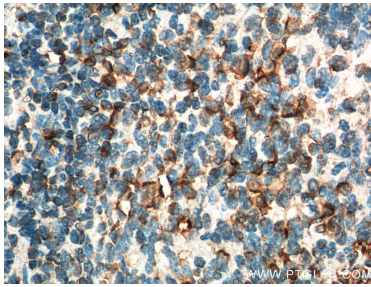
Jurkat cells were subjected to SDS PAGE followed by western blot with 19694-1-AP (INPP5D antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



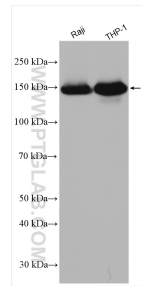
IP result of anti-INPP5D (IP:19694-1-AP, 4ug; Detection:19694-1-AP 1:300) with Ramos cells lysate 3600 ug.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19694-1-AP (INPP5D Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19694-1-AP (INPP5D Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 19694-1-AP (INPP5D antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.