For Research Use Only

INPP5D Polyclonal antibody

Catalog Number:19694-1-AP 5 Publications

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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 ug 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

For technical support and original validation data for this product please contact:
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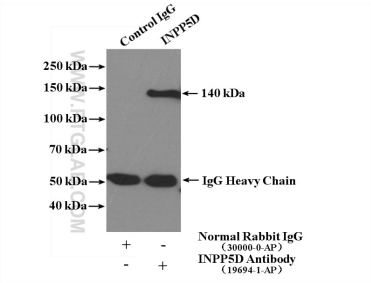
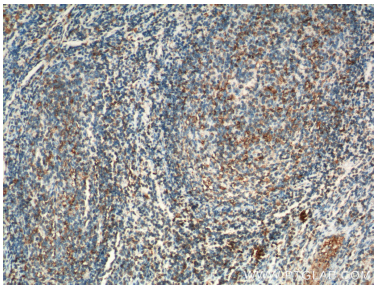
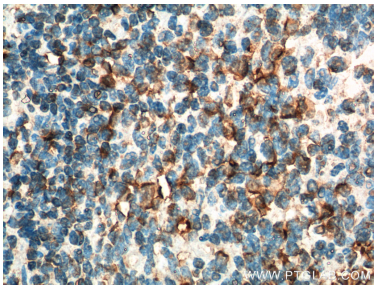
Selected Validation Data



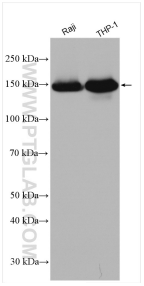
IP result of anti-INPP5D (IP:19694-1-AP, 4ug; Detection:19694-1-AP 1:300) with Ramos cells lysate 3600 ug.



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.