10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SHARPIN Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59297

Specification

SHARPIN Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9H0F6
Reactivity	**Rat, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**40 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human SHARPIN**
Epitope Specificity	**271-387/387**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm. Enriched at synaptic sites in mature neurons where it colocalizes with SHANK1.**
SIMILARITY	**Contains 1 RanBP2-type zinc finger.**
SUBUNIT	**Monomer and homodimer. Interacts with SHANK1, EYA1 and EYA2 (By similarity). Component of the LUBAC complex (linear ubiquitin chain assembly complex) which consists of SHARPIN, RBCK1 and RNF31. LUBAC has a MW of approximative 600 kDa suggesting a heteromultimeric assembly of its subunits. Associates with the TNF-R1 signaling complex (TNF-RSC) in a stimulation-dependent manner.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
SHARPIN is a 387 amino acid protein that localizes to the cytoplasm and contains one RanBP2-type zinc finger. Expressed at high levels in placenta and skeletal muscle and present at lower levels in colon, brain, heart, liver, kidney, lung, thymus and small intestine, SHARPIN interacts with Shank 1 and is thought to play a role in the control of inflammatory responses and in the overall development of the immune system. SHARPIN exists as three alternatively spliced isoforms and shares 73% sequence identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding SHARPIN maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SHARPIN Polyclonal Antibody - Additional Information

Gene ID 81858

Other Names
Sharpin, Shank-associated RH domain-interacting protein, Shank-interacting protein-like 1, hSIPL1, SHARPIN {ECO:0000303|PubMed:20179993}, SIPL1

Target/Specificity
Highly expressed in skeletal muscle and placenta and at lower levels in brain, heart, colon without mucosa, thymus, spleen, kidney, liver, small intestine, lung and peripheral blood leukocytes.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

SHARPIN Polyclonal Antibody - Protein Information

Name SHARPIN {ECO:0000303|PubMed:20179993}

Synonyms SIPL1

Function
Component of the LUBAC complex which conjugates linear polyubiquitin chains in a head-to-tail manner to substrates and plays a key role in NF-kappa-B activation and regulation of inflammation (PubMed:21455173, PubMed:21455180, PubMed:21455181). LUBAC conjugates linear polyubiquitin to IKBKG and RIPK1 and is involved in activation of the canonical NF-kappa-B and the JNK signaling pathways (PubMed:21455173, PubMed:21455180, PubMed:21455181). Linear ubiquitination mediated by the LUBAC complex interferes with TNF- induced cell death and thereby prevents inflammation (PubMed:21455173, PubMed:21455180, PubMed:21455181). LUBAC is recruited to the TNF-R1 signaling complex (TNF-RSC) following polyubiquitination of TNF-RSC components by BIRC2 and/or BIRC3 and to conjugate linear polyubiquitin to IKBKG and possibly other components contributing to the stability of the complex (PubMed:21455173, PubMed:21455180, PubMed:21455181). The LUBAC complex is also involved in innate immunity by conjugating linear polyubiquitin chains at the surface of bacteria invading the cytosol to form the ubiquitin coat surrounding bacteria (PubMed:28481331). LUBAC is not able to initiate formation of the bacterial ubiquitin coat, and can only promote formation of linear polyubiquitins on pre-existing ubiquitin (PubMed:28481331). The bacterial

ubiquitin coat acts as an 'eat-me' signal for xenophagy and promotes NF-kappa-B activation (PubMed:28481331). Together with OTULIN, the LUBAC complex regulates the canonical Wnt signaling during angiogenesis (PubMed:23708998).

Cellular Location
Cytoplasm, cytosol. Synapse {ECO:0000250|UniProtKB:Q9EQL9}. Note=Enriched at synaptic sites in mature neurons where it colocalizes with SHANK1 {ECO:0000250|UniProtKB:Q9EQL9}

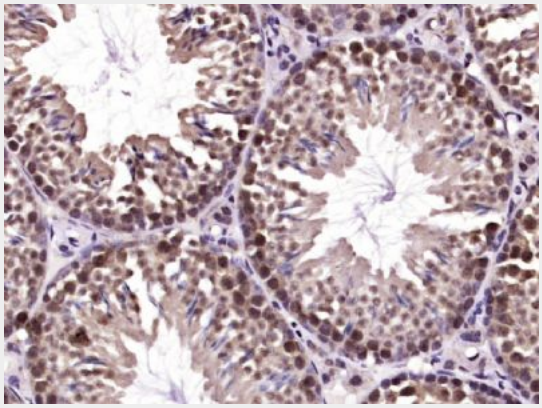
Tissue Location
Highly expressed in skeletal muscle and placenta and at lower levels in brain, heart, colon without mucosa, thymus, spleen, kidney, liver, small intestine, lung and peripheral blood leukocytes. Up-regulated in various tumor tissues such as kidney, liver, ovary and pancreas tumors.

SHARPIN Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SHARPIN Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SHARPIN) Polyclonal Antibody, Unconjugated (bs-9581R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.