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SARA Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57501

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	O95405
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	156403
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SARA
Epitope Specificity	71-170/1425
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. Early endosome membrane.
SIMILARITY	Contains 1 FYVE-type zinc finger.
SUBUNIT	Interacts (via the SBD region) with SMAD2; the interaction recruits SMAD2 to the TGF-beta receptor and is disrupted by phosphorylation of SMAD2 upon TGF-beta receptor activation. Interacts with SMAD3. Interacts with TGFBR1 and TGFBR2; the interaction recruits SMAD2 to the TGF-beta receptor. Interacts with PML. {ECO:0000269|PubMed:10615055,
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a double zinc finger motif-containing protein that participates in the transforming growth factor-beta (TGFB) signalling pathway. The encoded protein interacts directly with SMAD2 and SMAD3, and recruits SMAD2 to the TGFB receptor. There are multiple pseudogenes for this gene on chromosomes 2, 15, and X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2013]

Additional Information

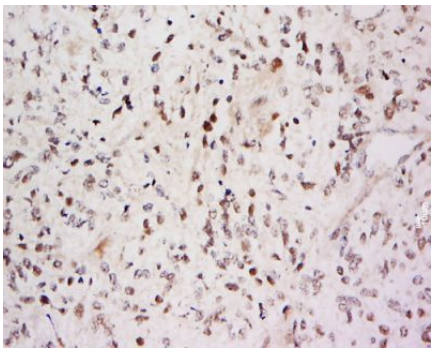
Gene ID	9372
Other Names	Zinc finger FYVE domain-containing protein 9, Mothers against decapentaplegic homolog-interacting protein, Madh-interacting protein, Novel serine protease, NSP, Receptor activation anchor, hSARA, Smad anchor for receptor activation, ZFYVE9, MADHIP, SARA, SMADIP
Target/Specificity	Ubiquitous. In the brain found primarily in the cerebrovascular smooth muscle cells and reactive astrocytes.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C 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 °C.

Protein Information

Name	ZFYVE9
Synonyms	MADHIP, SARA, SMADIP
Function	Early endosomal protein that functions to recruit SMAD2/SMAD3 to intracellular membranes and to the TGF-beta receptor. Plays a significant role in TGF-mediated signaling by regulating the subcellular location of SMAD2 and SMAD3 and modulating the transcriptional activity of the SMAD3/SMAD4 complex. Possibly associated with TGF-beta receptor internalization.
Cellular Location	Cytoplasm. Early endosome membrane.
Tissue Location	Ubiquitous. In the brain found primarily in the cerebrovascular smooth muscle cells and reactive astrocytes

Images



Tissue/cell: Glioma cell tumor; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SARA Polyclonal Antibody, Unconjugated(AP57501) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining