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SARA Rabbit mAb

Catalog # AP76703

Product Information

Application	WB, IHC-P
Primary Accession	O95405
Reactivity	Rat, Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	156403

Additional Information

Gene ID	9372
Other Names	ZFYVE9
Dilution	WB~~1:1000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

Background

ZFYVE9, also known as SARA (Smad anchor for receptor activation), is a double zinc finger (FYVE domain) protein that interacts directly with SMAD2 and SMAD3, and is involved in Alzheimer's disease. SARA functions to recruit SMAD2/SMAD3 to intracellular membranes and to the TGF-beta receptor. SARA 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. SARA is possibly associated with TGF-beta receptor internalization.