
Product Name: S2P Rabbit Polyclonal Antibody**Catalog #: APRab17522**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000

Molecular Weight

Antigen Information

Gene Name	MBTPS2 MBTPS2; S2P; Membrane-bound transcription factor site-2 protease; Endopeptidase S2P;
Alternative Names	Sterol regulatory element-binding proteins intramembrane protease; SREBPs intramembrane protease
Gene ID	51360.0
SwissProt ID	O43462
Immunogen	The antiserum was produced against synthesized peptide derived from human MBTPS2. AA range:301-350

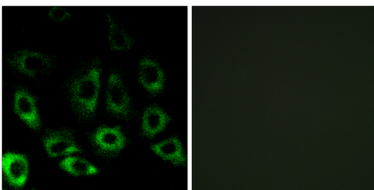
Background

This gene encodes a intramembrane zinc metalloprotease, which is essential in development. This protease functions in the signal protein activation involved in sterol control of transcription and the ER stress response. Mutations in this gene have been associated with ichthyosis follicularis with atrichia and photophobia (IFAP syndrome); IFAP syndrome has been quantitatively linked to a reduction in cholesterol homeostasis and ER stress response.[provided by RefSeq, Aug 2009],catalytic activity:Cleaves several transcription factors that are type-2 transmembrane proteins within membrane-spanning domains. Known substrates include sterol regulatory element-binding protein (SREBP) -1, SREBP-2 and forms of the transcriptional activator ATF6. SREBP-2 is cleaved at the site 477-DRSRILL-|-CVLTFCLCLSFNPLTSLQWGA-505. The residues Asn-Pro, 11 residues distal to the site of cleavage in the membrane-spanning domain, are important for cleavage by S2P endopeptidase. Replacement of either of these residues does not prevent cleavage, but there is no cleavage if both of these residues are replaced.,cofactor:Binds 1 zinc ion per subunit.,function:Intramembrane proteolysis of sterol-regulatory element-binding proteins (SREBPs) within the first transmembrane segment thereby releasing the N-terminal segment with a portion of the transmembrane segment attached. Site-2 cleavage comes after site-1 cleavage which takes place in the luminal loop.,similarity:Belongs to the peptidase M50A family.,tissue specificity:Expressed in heart, brain, placenta, lung, liver, muscle, kidney and pancreas.,

Research Area

Cardiovascular; Lipids / Lipoproteins; Lipid Metabolism; Cholesterol Metabolism; Signal Transduction; Metabolism; Cell Biology; Proteolysis / Ubiquitin; Proteolytic enzymes; Other proteases; Pathways and Processes; Metabolic signaling pathways; Lipid and lipoprotein metabolism

Image Data



Immunofluorescence analysis of A549 cells, using MBTSP2 Antibody. The picture on the right is blocked with the synthesized peptide.