

Product name:	S2P Rabbit Polyclonal Antibody
Cat number:	ABN17522
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MBTPS2. AA range:301-350
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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-]-CVLTFLCLSFNPLTSLQWGGA-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.,