

**MBTPS2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12972a****Specification**

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**MBTPS2 Antibody (N-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">O43462</a>
Other Accession	<a href="#">Q8CHX6</a> , <a href="#">Q0III2</a> , <a href="#">NP_056968.1</a>
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57444
Antigen Region	15-44

**MBTPS2 Antibody (N-term) - Additional Information****Gene ID** 51360**Other Names**

Membrane-bound transcription factor site-2 protease, Endopeptidase S2P, Sterol regulatory element-binding proteins intramembrane protease, SREBPs intramembrane protease, MBTPS2, S2P

**Target/Specificity**

This MBTPS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-44 amino acids from the N-terminal region of human MBTPS2.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MBTPS2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MBTPS2 Antibody (N-term) - Protein Information**

**Name** MBTPS2 {ECO:0000303|PubMed:19361614, ECO:0000312|HGNC:HGNC:15455}

**Function** Zinc metalloprotease that mediates intramembrane proteolysis of proteins such as ATF6, ATF6B, SREBF1/SREBP1 and SREBF2/SREBP2 (PubMed:[11163209](#), PubMed:[10805775](#)). Catalyzes the second step in the proteolytic activation of the sterol regulatory element-binding proteins (SREBPs) SREBF1/SREBP1 and SREBF2/SREBP2: cleaves SREBPs within the first transmembrane segment, thereby releasing the N- terminal segment with a portion of the transmembrane segment attached (PubMed:[10805775](#), PubMed:[27380894](#), PubMed:[9659902](#)). Mature N-terminal SREBP fragments shuttle to the nucleus and activate gene transcription (PubMed:[10805775](#), PubMed:[27380894](#), PubMed:[9659902](#)). Also mediates the second step in the proteolytic activation of the cyclic AMP-dependent transcription factor ATF-6 (ATF6 and ATF6B) (PubMed:[11163209](#)). Involved in intramembrane proteolysis during bone formation (PubMed:[27380894](#)). In astrocytes and osteoblasts, upon DNA damage and ER stress, mediates the second step of the regulated intramembrane proteolytic activation of the transcription factor CREB3L1, leading to the inhibition of cell- cycle progression (PubMed:[16417584](#)).

#### Cellular Location

Membrane; Multi- pass membrane protein. Cytoplasm. Golgi apparatus membrane; Multi-pass membrane protein

#### Tissue Location

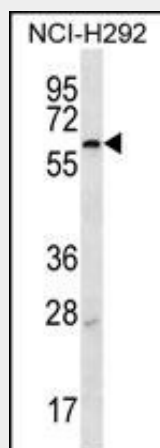
Expressed in heart, brain, placenta, lung, liver, muscle, kidney and pancreas.

#### MBTPS2 Antibody (N-term) - Protocols

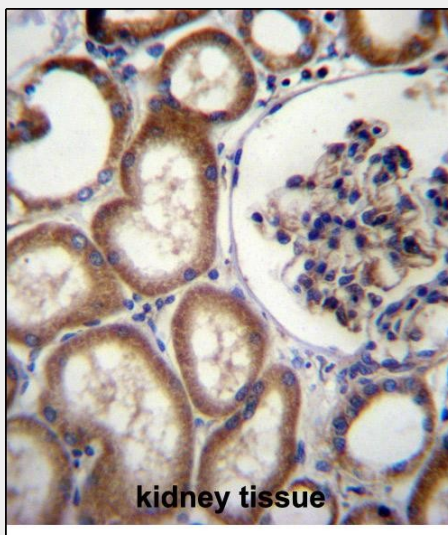
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### MBTPS2 Antibody (N-term) - Images



MBTPS2 Antibody (N-term) (Cat. #AP12972a) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the MBTPS2 antibody detected the MBTPS2 protein (arrow).



MBTPS2 Antibody (N-term) (Cat. #AP12972a) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MBTPS2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **MBTPS2 Antibody (N-term) - 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.

#### **MBTPS2 Antibody (N-term) - References**

Ming, A., et al. *Pediatr Dermatol* 26(4):427-431(2009)  
Oeffner, F., et al. *Am. J. Hum. Genet.* 84(4):459-467(2009)  
Lu, Y., et al. *J. Lipid Res.* 49(12):2582-2589(2008)  
Shen, J., et al. *J. Biol. Chem.* 279(41):43046-43051(2004)  
Lee, K., et al. *Genes Dev.* 16(4):452-466(2002)