

**HM13 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14392b****Specification**

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**HM13 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q8TCT9</a>
Other Accession	<a href="#">NP_110416.1</a> , <a href="#">NP_848697.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41488
Antigen Region	325-354

**HM13 Antibody (C-term) - Additional Information****Gene ID** 81502**Other Names**

Minor histocompatibility antigen H13, 3423-, Intramembrane protease 1, IMP-1, IMPAS-1, hIMP1, Presenilin-like protein 3, Signal peptide peptidase, HM13, H13, IMP1, PSL3, SPP

**Target/Specificity**

This HM13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 325-354 amino acids from the C-terminal region of human HM13.

**Dilution**

WB~~1:1000

**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**

HM13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**HM13 Antibody (C-term) - Protein Information****Name** HM13**Synonyms** H13, IMP1, PSL3, SPP

**Function** Catalyzes intramembrane proteolysis of some signal peptides after they have been cleaved from a preprotein, resulting in the release of the fragment from the ER membrane into the cytoplasm. Required to generate lymphocyte cell surface (HLA-E) epitopes derived from MHC class I signal peptides (PubMed:[11714810](#)). May be necessary for the removal of the signal peptide that remains attached to the hepatitis C virus core protein after the initial proteolytic processing of the polyprotein (PubMed:[12145199](#)). Involved in the intramembrane cleavage of the integral membrane protein PSEN1 (PubMed:[12077416](#), PubMed:[11714810](#), PubMed:[14741365](#)). Cleaves the integral membrane protein XBP1 isoform 1 in a DERL1/RNF139-dependent manner (PubMed:[25239945](#)). May play a role in graft rejection (By similarity).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein; Luminal side

#### Tissue Location

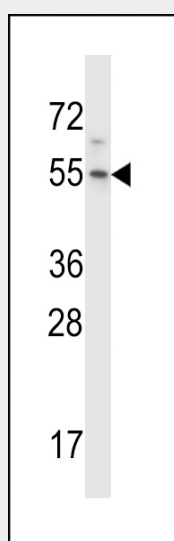
Widely expressed with highest levels in kidney, liver, placenta, lung, leukocytes and small intestine and reduced expression in heart and skeletal muscle. Expressed abundantly in the CNS with highest levels in thalamus and medulla

### HM13 Antibody (C-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](#)

### HM13 Antibody (C-term) - Images



HM13 Antibody (C-term) (Cat. #AP14392b) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the HM13 antibody detected the HM13 protein (arrow).

### HM13 Antibody (C-term) - Background

The protein encoded by this gene, which localizes to the endoplasmic reticulum, catalyzes intramembrane proteolysis of some signal peptides after they have been cleaved from a preprotein. This activity is required to generate signal sequence-derived human lymphocyte antigen-E epitopes that are recognized by the immune system, and to process hepatitis C virus core protein. The encoded protein is an integral membrane protein with sequence motifs characteristic of the presenilin-type aspartic proteases. Multiple transcript variants encoding several different isoforms have been found for this gene.

#### **HM13 Antibody (C-term) - References**

Sato, T., et al. Biochemistry 45(28):8649-8656(2006)  
Loureiro, J., et al. Nature 441(7095):894-897(2006)  
Urny, J., et al. Biochim. Biophys. Acta 1759 (3-4), 159-165 (2006) :  
Friedmann, E., et al. J. Biol. Chem. 279(49):50790-50798(2004)  
Soares, M.R., et al. FEBS Lett. 560 (1-3), 134-140 (2004) :