

**YMEL1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP4882a****Specification**

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**YMEL1 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O96TA2</a>
Other Accession	<a href="#">O925S8</a> , <a href="#">O88967</a>
Reactivity	Human, Hamster
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	191-219

**YMEL1 Antibody (N-term) - Additional Information****Gene ID** 10730**Other Names**

ATP-dependent zinc metalloprotease YME1L1, 3424-, ATP-dependent metalloprotease FtsH1, Meg-4, Presenilin-associated metalloprotease, PAMP, YME1-like protein 1, YME1L1, FTSH1, YME1L

**Target/Specificity**

This YMEL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 191-219 amino acids from the N-terminal region of human YMEL1.

**Dilution**WB~~1:1000  
IHC-P~~1:50~100  
FC~~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**

YMEL1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**YMEL1 Antibody (N-term) - Protein Information****Name** YME1L1

**Synonyms** FTSH1, YME1L

**Function** ATP-dependent metalloprotease that catalyzes the degradation of folded and unfolded proteins with a suitable degron sequence in the mitochondrial intermembrane region (PubMed:[26923599](#), PubMed:[27786171](#)). Plays an important role in regulating mitochondrial morphology and function by cleaving OPA1 at position S2, giving rise to a form of OPA1 that promotes maintenance of normal mitochondrial structure and mitochondrial protein metabolism (PubMed:[18076378](#), PubMed:[26923599](#), PubMed:[27495975](#)). Ensures cell proliferation, maintains normal cristae morphology and complex I respiration activity, promotes antiapoptotic activity and protects mitochondria from the accumulation of oxidatively damaged membrane proteins (PubMed:[22262461](#)). Required for normal, constitutive degradation of PRELID1 (PubMed:[27495975](#)). Catalyzes the degradation of OMA1 in response to membrane depolarization (PubMed:[26923599](#)). Required to control the accumulation of nonassembled respiratory chain subunits (NDUFB6, OX4 and ND1) (PubMed:[22262461](#)).

**Cellular Location**

Mitochondrion inner membrane Mitochondrion

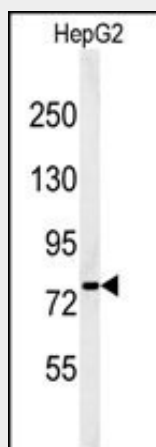
**Tissue Location**

High expression in cardiac and skeletal muscle mitochondria.

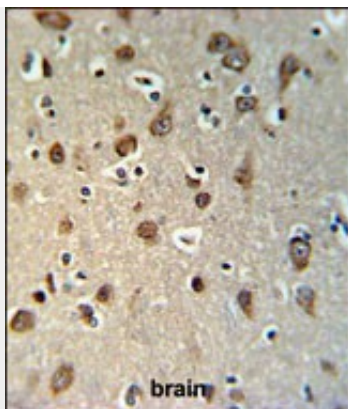
**YMEL1 Antibody (N-term) - Protocols**

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

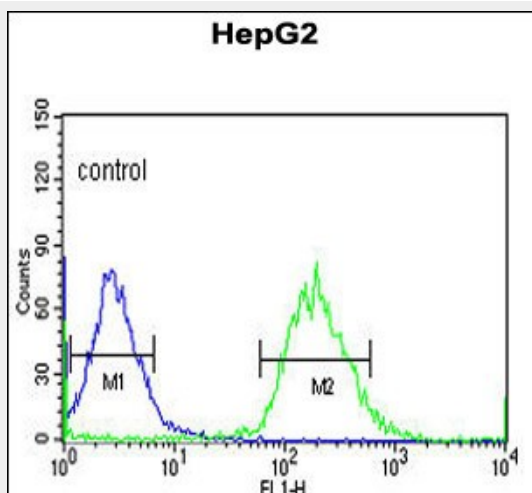
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**YMEL1 Antibody (N-term) - Images**

Western blot analysis of YMEL1 Antibody (N-term) (Cat. #AP4882a) in HepG2 cell line lysates (35ug/lane). YMEL1 (arrow) was detected using the purified Pab.



YMEL1 Antibody (N-term) (Cat. #AP4882a) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the YMEL1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



YMEL1 Antibody (N-term) (Cat. #AP4882a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### YMEL1 Antibody (N-term) - Background

YMEL1 is the human ortholog of yeast mitochondrial AAA metalloprotease, Yme1p. It is localized in the mitochondria and can functionally complement a yme1 disruptant yeast strain. It is proposed that this gene plays a role in mitochondrial protein metabolism and could be involved in mitochondrial pathologies.

#### YMEL1 Antibody (N-term) - References

Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)  
Deloukas, P., et al. Nature 429(6990):375-381(2004)  
Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)

#### YMEL1 Antibody (N-term) - Citations

- [The first direct activity assay for the mitochondrial protease OMA1.](#)
- [Renal cold storage followed by transplantation impairs expression of key mitochondrial fission and fusion proteins.](#)