

YMEL1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP4882a**Specification**

YMEL1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O96TA2](#)**YMEL1 Antibody (N-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

YMEL1 Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/26923599), PubMed: [27786171](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/18076378), PubMed: [26923599](http://www.uniprot.org/citations/26923599), PubMed: [27495975](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/22262461)). Required for normal, constitutive degradation of PRELID1 (PubMed: [27495975](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

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