

HERPUD1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17228a**Specification**

HERPUD1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q15011](#)**HERPUD1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 9709**Other Names**

Homocysteine-responsive endoplasmic reticulum-resident ubiquitin-like domain member 1 protein, Methyl methanesulfonate (MMF)-inducible fragment protein 1, HERPUD1, HERP, KIAA0025, MIF1

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.

HERPUD1 Antibody (N-term) Blocking Peptide - Protein Information**Name** HERPUD1**Synonyms** HERP, KIAA0025, MIF1**Function**

Component of the endoplasmic reticulum quality control (ERQC) system also called ER-associated degradation (ERAD) involved in ubiquitin-dependent degradation of misfolded endoplasmic reticulum proteins (PubMed: [16289116](http://www.uniprot.org/citations/16289116), PubMed: [28827405](http://www.uniprot.org/citations/28827405)). Could enhance presenilin- mediated amyloid-beta protein 40 generation. Binds to ubiquilins and this interaction is required for efficient degradation of CD3D via the ERAD pathway (PubMed: [18307982](http://www.uniprot.org/citations/18307982)).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location

Widely expressed; in the brain, expression seems to be restricted to neurons and vascular smooth muscle cells. Present in activated microglia in senile plaques in the brain of patients with

Alzheimer disease

HERPUD1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

HERPUD1 Antibody (N-term) Blocking Peptide - Images

HERPUD1 Antibody (N-term) Blocking Peptide - Background

The accumulation of unfolded proteins in the endoplasmicreticulum (ER) triggers the ER stress response. This responseincludes the inhibition of translation to prevent furtheraccumulation of unfolded proteins, the increased expression ofproteins involved in polypeptide folding, known as the unfoldedprotein response (UPR), and the destruction of misfolded proteinsby the ER-associated protein degradation (ERAD) system. This genemay play a role in both UPR and ERAD. Its expression is induced byUPR and it has an ER stress response element in its promoter regionwhile the encoded protein has an N-terminal ubiquitin-like domainwhich may interact with the ERAD system. This protein has beenshown to interact with presenilin proteins and to increase thelevel of amyloid-beta protein following its overexpression.Alternative splicing of this gene produces multiple transcriptvariants, some encoding different isoforms. The full-length natureof all transcript variants has not been determined. [provided byRefSeq].

HERPUD1 Antibody (N-term) Blocking Peptide - References

Hirabayashi, Y., et al. J. Immunol. 184(6):3276-3283(2010)McLaughlin, M., et al. J. Biol. Chem. 285(10):6960-6969(2010)Zabaneh, D., et al. PLoS ONE 5 (8), E11961 (2010) :Ridker, P.M., et al. Circ Cardiovasc Genet 2(1):26-33(2009)Heid, I.M., et al. Circ Cardiovasc Genet 1(1):10-20(2008)