

HERPUD1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP17228a

Specification

HERPUD1 Antibody (N-term) Blocking Peptide - Product Information

Primary 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, PubMed: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).

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 of proteins involved in polypeptide folding, known as the unfolded protein response (UPR), and the destruction of misfolded proteins by the ER-associated protein degradation (ERAD) system. This genemay play a role in both UPR and ERAD. Its expression is induced by UPR 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 been shown to interact with presentlin proteins and to increase the level of amyloid-beta protein following its overexpression. Alternative splicing of this gene produces multiple transcript variants, some encoding different isoforms. The full-length nature of all transcript variants has not been determined. [provided by RefSeq].

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)