

HERPUD1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17228A

Specification

HERPUD1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q15011</u> <u>NP_001010989.1</u>, <u>NP_001010990.1</u> Human Rabbit Polyclonal Rabbit IgG 43720 55-83

HERPUD1 Antibody (N-term) - 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

Target/Specificity

This HERPUD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-83 amino acids from the N-terminal region of human HERPUD1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

HERPUD1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HERPUD1 Antibody (N-term) - 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:<u>16289116</u>, PubMed:<u>28827405</u>). 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:<u>18307982</u>).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location

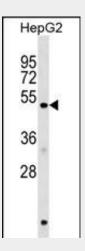
Widely expressed; in the brain, expression seems to be restricted to neurons and vascular smooth muscle cells. Present in activated microglia in senile plaques in the brain of patients with Alzheimer disease

HERPUD1 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HERPUD1 Antibody (N-term) - Images



HERPUD1 Antibody (N-term) (Cat. #AP17228a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the HERPUD1 antibody detected the HERPUD1 protein (arrow).

HERPUD1 Antibody (N-term) - Background

The accumulation of unfolded proteins in the endoplasmic reticulum (ER) triggers the ER stress response. This response includes the inhibition of translation to prevent further accumulation 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 gene may 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 region while the encoded protein has an N-terminal ubiquitin-like domain which may interact with the ERAD system. This protein has been shown to interact with presenilin 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) - 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)