

# **HERPUD1 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17228A

### **Specification**

# **HERPUD1** Antibody (N-term) - Product Information

Application WB,E
Primary Accession O15011

Other Accession NP 001010989.1, NP 001010990.1

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
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

#### **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**

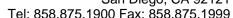
HERPUD1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **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: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**

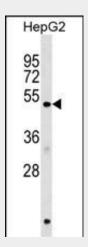
Widely expressed; in the brain, expression seems to be restricted to neurons and vascular smooth muscle cells. Present in activated microglia in senile plagues in the brain of patients with Alzheimer disease

### **HERPUD1** Antibody (N-term) - Protocols

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

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

### **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)