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HERPUD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56010

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q15011
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43720
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HERPUD1
Epitope Specificity	1-100/391
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum membrane; Multi-pass membrane protein.
SIMILARITY	Contains 1 ubiquitin-like domain.
SUBUNIT	Interacts with PSEN1 and PSEN2. Interacts with SYVN1 and UBXN6.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	HERPUD1 is a 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 encoding different isoforms. The full-length nature of all transcript variants has not been determined. [provided by RefSeq, Jan 2013].

Additional Information

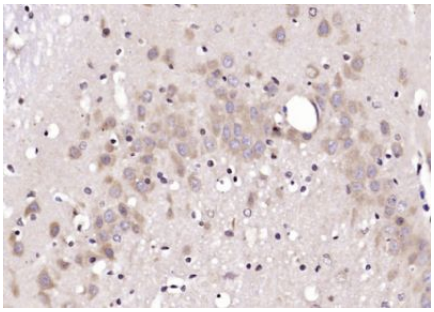
Gene ID	9709
Other Names	Homocysteine-responsive endoplasmic reticulum-resident ubiquitin-like domain member 1 protein, Methyl methanesulfonate (MMF)-inducible fragment protein 1, HERPUD1, HERP, KIAA0025, MIF1
Target/Specificity	Widely expressed; in the brain, expression seems to be restricted to neurons and vascular smooth muscle cells. Present in activated microglia in senile

	plaques in the brain of patients with Alzheimer disease.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HERPUD1) Polyclonal Antibody, Unconjugated (AP56010) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.