

HERPUD1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant HERPUD1. Catalog # AT2353a

Specification

HERPUD1 Antibody (monoclonal) (M01) - Product Information

Application WB, E **Primary Accession** 015011 BC000086 Other Accession Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 43720

HERPUD1 Antibody (monoclonal) (M01) - 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

HERPUD1 (AAH00086, 1 a.a. \sim 391 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000 E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

HERPUD1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

HERPUD1 Antibody (monoclonal) (M01) - Protocols

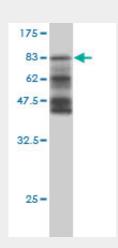
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

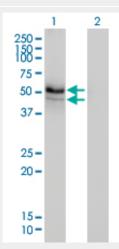


- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HERPUD1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (68.75 KDa).

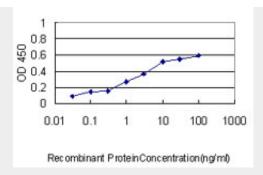


Western Blot analysis of HERPUD1 expression in transfected 293T cell line by HERPUD1 monoclonal antibody (M01), clone 3E10.

Lane 1: HERPUD1 transfected lysate(44 KDa).

Lane 2: Non-transfected lysate.





Detection limit for recombinant GST tagged HERPUD1 is approximately 0.3ng/ml as a capture antibody.

HERPUD1 Antibody (monoclonal) (M01) - 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 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.

HERPUD1 Antibody (monoclonal) (M01) - References

The endoplasmic reticulum stress-inducible protein, Herp, is a potential triggering antigen for anti-DNA response. Hirabayashi Y, et al. J Immunol, 2010 Mar 15. PMID 20147634.Inhibition of secretion of interleukin (IL)-12/IL-23 family cytokines by 4-trifluoromethyl-celecoxib is coupled to degradation via the endoplasmic reticulum stress protein HERP. McLaughlin M, et al. J Biol Chem, 2010 Mar 5. PMID 20054003.Polymorphism in the CETP gene region, HDL cholesterol, and risk of future myocardial infarction: Genomewide analysis among 18 245 initially healthy women from the Women's Genome Health Study. Ridker PM, et al. Circ Cardiovasc Genet, 2009 Feb. PMID 20031564.Genome-wide association analysis of high-density lipoprotein cholesterol in the population-based KORA study sheds new light on intergenic regions. Heid IM, et al. Circ Cardiovasc Genet, 2008 Oct. PMID 20031538.Homocysteine-induced endoplasmic reticulum protein (herp) is up-regulated in parkinsonian substantia nigra and present in the core of Lewy bodies. Slodzinski H, et al. Clin Neuropathol, 2009 Sep-Oct. PMID 19788048.