10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EIF4G2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant EIF4G2.
Catalog # AT1882a

Product Information

Application	WB, IHC
Primary Accession	P78344
Other Accession	NM_001418
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3B5
Calculated MW	102362

Additional Information

Gene ID	1982
Other Names	Eukaryotic translation initiation factor 4 gamma 2, eIF-4-gamma 2, eIF-4G 2, eIF4G 2, Death-associated protein 5, DAP-5, p97, EIF4G2 (HGNC:3297)
Target/Specificity	EIF4G2 (NP_001409, 811 a.a. ~ 889 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
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	EIF4G2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

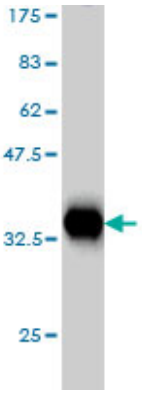
Background

Translation initiation is mediated by specific recognition of the cap structure by eukaryotic translation initiation factor 4F (eIF4F), which is a cap binding protein complex that consists of three subunits: eIF4A, eIF4E and eIF4G. The protein encoded by this gene shares similarity with the C-terminal region of eIF4G that contains the binding sites for eIF4A and eIF3; eIF4G, in addition, contains a binding site for eIF4E at the N-terminus. Unlike eIF4G, which supports cap-dependent and independent translation, this gene product functions as a general repressor of translation by forming translationally inactive complexes. In vitro and in vivo studies indicate that translation of this mRNA initiates exclusively at a non-AUG (GUG) codon. Alternatively spliced transcript variants encoding different isoforms of this gene have been described.

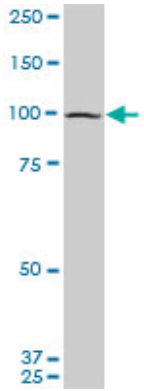
References

Crystallization and preliminary X-ray diffraction analysis of the MIF4G domain of DAP5. Frank F, et al. Acta Crystallogr Sect F Struct Biol Cryst Commun, 2010 Jan 1. PMID 20057060.Translation of mRNAs from vesicular stomatitis virus and vaccinia virus is differentially blocked in cells with depletion of eIF4GI and/or eIF4GII. Welnowska E, et al. J Mol Biol, 2009 Dec 4. PMID 19769989.Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.The crystal structure of the C-terminal DAP5/p97 domain sheds light on the molecular basis for its processing by caspase cleavage. Liberman N, et al. J Mol Biol, 2008 Nov 14. PMID 18722383.Death-associated protein 5 (DAP5/p97/NAT1) contributes to retinoic acid-induced granulocytic differentiation and arsenic trioxide-induced apoptosis in acute promyelocytic leukemia. Ozpolat B, et al. Apoptosis, 2008 Jul. PMID 18491231.

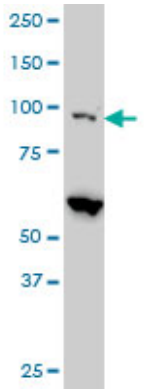
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (34.43 KDa) .

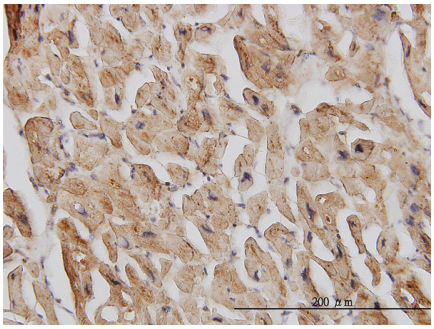


EIF4G2 monoclonal antibody (M01), clone 3B5. Western Blot analysis of EIF4G2 expression in PC-12 ((Cat # AT1882a)



EIF4G2 monoclonal antibody (M01), clone 3B5 Western Blot analysis of EIF4G2 expression in Hela S3 NE ((Cat # AT1882a)

Immunoperoxidase of monoclonal antibody to EIF4G2 on formalin-fixed paraffin-embedded human heart. [antibody concentration 3 ug/ml]



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.