

## EIF4G2 Antibody (monoclonal) (M01)

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

## **Specification**

## EIF4G2 Antibody (monoclonal) (M01) - Product Information

WB, IHC Application **Primary Accession** P78344 Other Accession NM 001418 Human, Rat Reactivity Host mouse Clonality Monoclonal Isotype IgG1 Kappa Calculated MW 102362

## EIF4G2 Antibody (monoclonal) (M01) - 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 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=3297" target="blank">HGNC:3297</a>)

## Target/Specificity

EIF4G2 (NP\_001409, 811 a.a.  $\sim$  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.

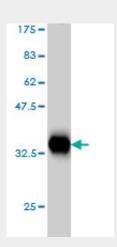
## EIF4G2 Antibody (monoclonal) (M01) - Protocols

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

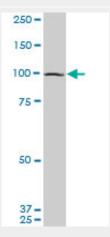


- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# EIF4G2 Antibody (monoclonal) (M01) - Images

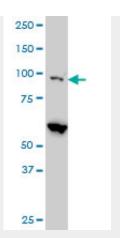


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (34.43 KDa) .

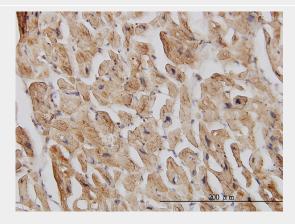


EIF4G2 monoclonal antibody (M01), clone 3B5. Western Blot analysis of EIF4G2 expression in PC-12 ( (Cat # AT1882a )





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]

# EIF4G2 Antibody (monoclonal) (M01) - 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.

### EIF4G2 Antibody (monoclonal) (M01) - 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.