

EIF4G1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant EIF4G1. Catalog # AT1880a

Specification

EIF4G1 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>Q04637</u> <u>NM_182917</u> Human, Mouse mouse Monoclonal IgG2a Kappa 175491

EIF4G1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 1981

Other Names Eukaryotic translation initiation factor 4 gamma 1, eIF-4-gamma 1, eIF-4G 1, eIF-4G1, p220, EIF4G1, EIF4G, EIF4G, EIF4GI

Target/Specificity EIF4G1 (NP_886553, 1500 a.a. ~ 1599 a.a) partial 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 EIF4G1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

EIF4G1 Antibody (monoclonal) (M01) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides



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

EIF4G1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



EIF4G1 monoclonal antibody (M01), clone 3A10. Western Blot analysis of EIF4G1 expression in IMR-32 ((Cat # AT1880a)





EIF4G1 monoclonal antibody (M01), clone 3A10. Western Blot analysis of EIF4G1 expression in NIH/3T3((Cat # AT1880a)



Detection limit for recombinant GST tagged EIF4G1 is 0.03 ng/ml as a capture antibody.

EIF4G1 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is a component of the multi-subunit protein complex EIF4F. This complex facilitates the recruitment of mRNA to the ribosome, which is a rate-limiting step during the initiation phase of protein synthesis. The recognition of the mRNA cap and the ATP-dependent unwinding of 5'-terminal secondary structure is catalyzed by factors in this complex. The subunit encoded by this gene is a large scaffolding protein that contains binding sites for other members of the EIF4F complex. A domain at its N-terminus can also interact with the poly(A)-binding protein, which may mediate the circularization of mRNA during translation. Alternative splicing results in multiple transcript variants, some of which are derived from alternative promoter usage.

EIF4G1 Antibody (monoclonal) (M01) - References

Over-expression of eukaryotic translation initiation factor 4 gamma 1 correlates with tumor progression and poor prognosis in nasopharyngeal carcinoma. Tu L, et al. Mol Cancer, 2010 Apr 16. PMID 20398343.Nuclear assortment of eIF4E coincides with shut-off of host protein synthesis upon poliovirus infection. Sukarieh R, et al. J Gen Virol, 2010 May. PMID 20053821.NAD(P)H quinone-oxydoreductase 1 protects eukaryotic translation initiation factor 4GI from degradation by the proteasome. Alard A, et al. Mol Cell Biol, 2010 Feb. PMID 20028737.HIV- 1 protease inhibits Capand poly(A)-dependent translation upon eIF4GI and PABP cleavage. Castell? A, et al. PLoS One, 2009 Nov 24. PMID 19956697.The Hsp90 inhibitor geldanamycin abrogates colocalization of eIF4E and eIF4E-transporter into stress granules and association of eIF4E with eIF4G. Suzuki Y, et al. J Biol Chem, 2009 Dec 18. PMID 19850929.