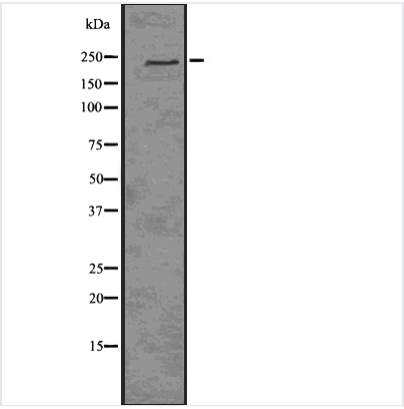
EIF4G1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	EIF4G1, Polyclonal Antibody
Full Product Name	EIF4G1 Antibody
Product Gene Name	anti-EIF4G1 antibody
Product Synonym Names	DKFZp686A1451; eIF 4 gamma 1; eIF 4G 1; eIF 4G1; eIF-4-gamma 1; eIF-4G 1; eIF-4G1; EIF4 gamma; EIF4F; EIF4G; EIF4G1; EIF4GI; Eukaryotic translation initiation factor 4 gamma 1; IF4G1_HUMAN; p220
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	EIF4G1 antibody detects endogenous levels of total EIF4G1
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	eIF4G1 peptide (MBS9626926) is used for blocking the activity of eIF4G1 antibody (MBS9608214)
Molecular Weight	Observed: 220 kDa Predicted: 176 kDa
3D Structure	ModBase 3D Structure for Q04637
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human EIF4G1
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-EIF4G1 antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-EIF4G1 antibody	WB: 1:1000-3000

Related Product Information for anti-EIF4G1 antibody	Function: Component of the protein complex eIF4F, which is involved in the recognition of the mRNA cap, ATP-dependent unwinding of 5'-terminal secondary structure and recruitment of mRNA to the ribosome. Subunit Structure: eIF4F is a multi-subunit complex, the composition of which varies with external and internal environmental conditions. It is composed of at least EIF4A, EIF4E (cap-binding) and EIF4G1/EIF4G3. Interacts with eIF3, mutually exclusive with EIF4A1 or EIFA2, EIF4E and through its N-terminus with PAPBC1. Interacts through its C-terminus with the serine/threonine kinases MKNK1, and with MKNK2. Appears to act as a scaffold protein, holding these enzymes in place to phosphorylate EIF4E. Non-phosphorylated EIF4EBP1 competes with EIF4G1/EIF4G3 to interact with EIF4E; insulin stimulated MAP-kinase (MAPK1 and MAPK3) phosphorylation of EIF4EBP1 causes dissociation of the complex allowing EIF4G1/EIF4G3 to bind and consequent initiation of translation. EIF4G1/EIF4G3 interacts with PABPC1 to bring about circularization of the mRNA. Rapamycin can attenuate insulin stimulation mediated by FKBPs. Interacts with EIF4E3. Interacts with CIRBP and MIF4GD. Interacts with rotavirus A NSP3; in this interaction, NSP3 takes the place of PABPC1 thereby inducing shutoff of host protein synthesis. Interacts with RBM4. Interacts with HNRNPD/AUF1; the interaction requires RNA. Interacts with human adenovirus 5 100K protein; this interaction promotes translational shunt in presence of polysomes containing viral tripartite leader mRNAs (PubMed:15314025). Post-translational Modifications: Phosphorylated at multiple sites in vivo. Phosphorylation at Ser-1185 by PRKCA induces binding to MKNK1.Following infection by certain enteroviruses, rhinoviruses and aphthoviruses, EIF4G1 is cleaved by the viral protease 2A, or the leader protease in the case of aphthoviruses. This shuts down the capped cellular mRNA transcription. Similarity: Belongs to the eukaryotic initiation factor 4G family.
Other Notes	Small volumes of anti-EIF4G1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for EIF4G1 purchase	MBS9608214 is an antibody targeting EIF4G1. Also known as EIF4G1 Antibody. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-EIF4G1 antibody
Western blot analysis of EIF4G1 using K562 whole lysates.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for EIF4G1. It may not necessarily be applicable to this product.

NCBI GI #	302699239
NCBI GeneID	1981
NCBI Accession #	NP_004944.3
UniProt Primary Accession #	Q04637
UniProt Secondary Accession #	O43177; O95066; Q5HYG0; Q6ZN21; Q8N102; D3DNT2; D3DNT4; D3DNT5; E9PFM1; G5E9S1
UniProt Related Accession #	Q04637
GenBank Nucleotide #	NM_004953.4
NCBI Official Full Name	eukaryotic translation initiation factor 4 gamma 1 isoform 4
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 4 gamma 1

NCBI Official Symbol	EIF4G1
NCBI Official Synonym Symbols	P220; EIF4F; EIF4G; EIF4GI; PARK18; EIF-4G1
UniProt Protein Name	Eukaryotic translation initiation factor 4 gamma 1
UniProt Synonym Protein Names	p220
Protein Family	Eukaryotic translation initiation factor
UniProt Gene Name	EIF4G1
UniProt Synonym Gene Names	EIF4F; EIF4G; EIF4GI; eIF-4-gamma 1; eIF-4G 1; eIF-4G1
NCBI Protein Information	eukaryotic translation initiation factor 4 gamma 1
NCBI Summary for EIF4G1	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. [provided by RefSeq, Aug 2010]
UniProt Comments for EIF4G1	Component of the protein complex eIF4F, which is involved in the recognition of the mRNA cap, ATP-dependent unwinding of 5'-terminal secondary structure and recruitment of mRNA to the ribosome.
Research Articles on EIF4G1	**1.** Lack of regulation of the interaction between the eIF4E/eIF4G subunits of the translation initiation factor complex eIF4F is a hallmark of cancer. The inhibitor 4EGI-1 binds to eIF4E, thereby preventing association with eIF4G through an allosteric mechanism. Binding of 4EGI-1 perturbs native correlated motions and increases correlated fluctuations in part of the eIF4G binding site.
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