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Rabbit Anti-eIF4GII antibody

SL14552R

Product Name:	eIF4GII
Chinese Name:	eIF4GII蛋白抗体
Alias:	eIF-4-gamma 3; eIF-4-gamma II; eIF-4G 3; eIF4G 3; EIF4G3; eIF4GII; Eukaryotic translation initiation factor 4 gamma 3; eukaryotic translation initiation factor 4 gamma, 3; eukaryotic translation initiation factor-4 gamma, 3; IF4G3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	177kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human eIF4GII:451-550/1585
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Translation initiation in eukaryotes necessitates the assembly of an 80S ribosomal complex. Eukaryotic initiation factors (eIFs) are utilized in a sequence of reactions that leads to 80S ribosomal assembly and initiation of translation. Mammalian eukaryotic translation initiation factor 4F (eIF4F) is a protein complex that contains eIF4A, eIF4E and eIF4G, binds mRNA at a 5'-cap motif and recruits the 43S ribosomal preinitiation

complex to the transcript. Along with eIF4B, the eIF4F complex mediates the unwinding of mRNA secondary structure to facilitate ribosome association. eIF4E specifically interacts with the 5' cap, eIF4A is a bidirectional RNA helicase, and eIF4GI and eIF4GII are scaffolding proteins which coordinate eIF4E, eIF4A, eIF3 and the 40S ribosome. eIF4GII (also known as eIF4G3 and eIF4-g3) is a 1,585 amino acid protein that is 46% homologous and functionally similar to eIF4GI.

Function:
Probable 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. Thought to be a functional homolog of EIF4G1.

Subunit:
Interacts with EIF4A, EIF4E, eIF3 and PABPC1. Part of a complex with EIF4E. 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 and EIF4G1/EIF4G3. EIF4G1/EIF4G3 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/EIFG3 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 (By similarity).

Post-translational modifications:
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.
Contains 5 HEAT repeats.
Contains 1 MI domain.
Contains 1 MIF4G domain. Contains 1 W2 domain.

SWISS:
O43432

Gene ID:
8672

Database links:

Entrez Gene: 8672 Human

	Entrez Gene: 230861 Mouse Entrez Gene: 298573 Rat Omim: 603929 Human SwissProt: O43432 Human SwissProt: Q80XI3 Mouse Unigene: 467084 Human Unigene: 732241 Human Unigene: 268903 Mouse Unigene: 407375 Mouse Unigene: 489798 Mouse Unigene: 220142 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.