

EIF3G Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5342c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q75821
Other Accession	Q5RK09 , Q9Z1D1 , Q6DRC4 , Q3ZC12 , Q641B2 , Q6DJI8 , NP_003746.2
Reactivity	Human
Predicted	Xenopus, Bovine, Zebrafish, Mouse, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26846
Calculated MW	35611
Antigen Region	209-238

Additional Information

Gene ID	8666
Other Names	Eukaryotic translation initiation factor 3 subunit G {ECO:0000255 HAMAP-Rule:MF_03006}, eIF3g {ECO:0000255 HAMAP-Rule:MF_03006}, Eukaryotic translation initiation factor 3 RNA-binding subunit {ECO:0000255 HAMAP-Rule:MF_03006}, eIF-3 RNA-binding subunit {ECO:0000255 HAMAP-Rule:MF_03006}, Eukaryotic translation initiation factor 3 subunit 4 {ECO:0000255 HAMAP-Rule:MF_03006}, eIF-3-delta {ECO:0000255 HAMAP-Rule:MF_03006}, eIF3 p42 {ECO:0000255 HAMAP-Rule:MF_03006}, eIF3 p44 {ECO:0000255 HAMAP-Rule:MF_03006}, EIF3G {ECO:0000255 HAMAP-Rule:MF_03006}
Target/Specificity	This EIF3G antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-238 amino acids from the Central region of human EIF3G.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EIF3G Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name	EIF3G {ECO:0000255 HAMAP-Rule:MF_03006}
Function	RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed: 17581632 , PubMed: 25849773 , PubMed: 27462815). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S pre-initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation (PubMed: 17581632). The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem-loop binding to exert either translational activation or repression (PubMed: 25849773). This subunit can bind 18S rRNA.
Cellular Location	Cytoplasm {ECO:0000255 HAMAP-Rule:MF_03006}. Nucleus {ECO:0000255 HAMAP-Rule:MF_03006, ECO:0000269 PubMed:17094969} Cytoplasm, perinuclear region {ECO:0000255 HAMAP-Rule:MF_03006, ECO:0000269 PubMed:17094969}. Note=Colocalizes with AIFM1 in the nucleus and perinuclear region

Background

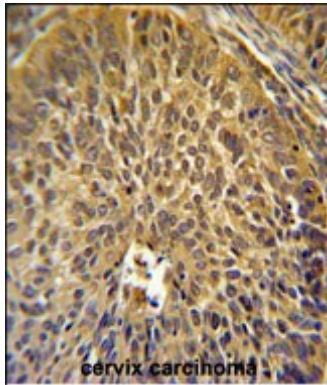
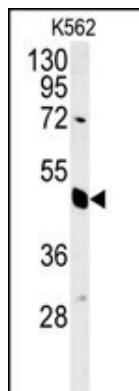
Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S preinitiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of posttermination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation. This subunit can bind 18S rRNA.

References

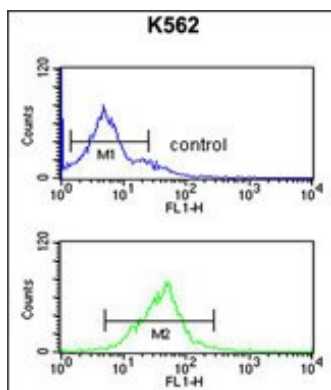
Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 105(47):18139-18144(2008)
Masutani, M., et al. EMBO J. 26(14):3373-3383(2007)
Damoc, E., et al. Mol. Cell Proteomics 6(7):1135-1146(2007)

Images

EIF3G Antibody (Center) (Cat. #AP5342c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the EIF3G antibody detected the EIF3G protein (arrow).



EIF3G Antibody (Center) (Cat. #AP5342c) immunohistochemistry analysis in formalin fixed and paraffin embedded human cervix carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the EIF3G Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



EIF3G Antibody (Center) (Cat. #AP5342c) flow cytometric analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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