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EIF3G Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5342c

Specification

EIF3G Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	O75821
Other Accession	Q5RK09, Q9Z1D1, Q6DRC4, Q3ZC12, Q641B2, Q6DJI8, NP_003746.2
Reactivity	**Human**
Predicted	**Xenopus, Bovine, Zebrafish, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**35611**
Antigen Region	**209-238**

EIF3G Antibody (Center) - 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~~1:50~100
FC~~1:10~50

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.

EIF3G Antibody (Center) - 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

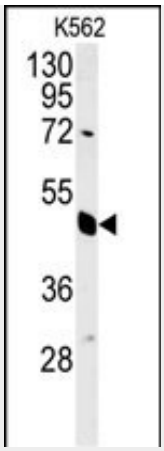
EIF3G Antibody (Center) - Protocols

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

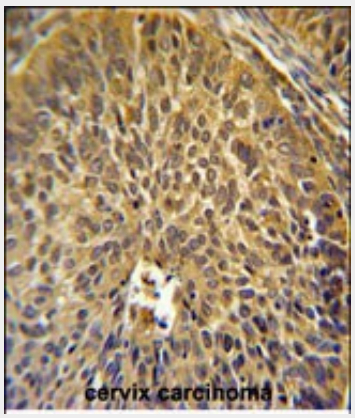
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EIF3G Antibody (Center) - Images

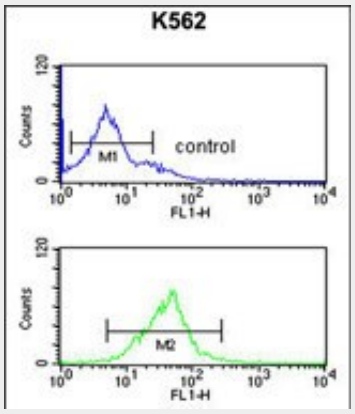
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EIF3G Antibody (Center) (Cat. #AP5342c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the EIF3G antibody detected the EIF3G protein (arrow).



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.

EIF3G Antibody (Center) - 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.

EIF3G Antibody (Center) - 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)