

EIF3S4 Rabbit pAb

Catalog # AP97515

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	075821
Other Accession	075821
Reactivity	Human
Predicted	Rat, Pig, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35611
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EIF3S4
Epitope Specificity	51-150/320
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the eIF-3 subunit G family. Contains 1 RRM (RNA recognition motif) domain.
Post-translational modifications	Phosphorylated. Phosphorylation is enhanced upon serum stimulation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. Eukaryotic initiation factors (eIFs) are utilized in a sequence of reactions that lead to 80S ribosomal assembly and, ultimately, translation. The eukaryotic initiation factor-3 (eIF3) scaffolding structure is the largest of the eIF complexes and includes eIF3 alpha, eIF3 beta, eIF3 gamma, eIF3 delta, all of which function to control the assembly of the 40S ribosomal subunit. Association of eIF3 proteins with the 40S ribosomal subunit stabilizes eIF2-GTP-Met-tRNAiMet complex association and mRNA binding, and promotes dissociation of 80S ribosomes into 40S and 60S subunits, thereby promoting the assembly of the pre-initiation complex. Overexpression of eIF3 proteins is common in several cancers, suggesting a role for eIF3 proteins in tumorigenesis.

Additional Information

Gene ID	8666
Other Names	EIF3G_BOVIN; EIF3G; Eukaryotic translation initiation factor 3 RNA-binding subunit (eIF-3 RNA-binding subunit); Eukaryotic translation initiation factor 3 subunit 4; eIF-3-delta; eIF3 p42; eIF3 p44; EIF3S4; EIF3G_HUMAN; EIF3G_MOUSE; Eif3p42; EIF3G_RAT; EIF3G_DANRE; eukaryotic translation initiation factor 3 subunit G; eukaryotic translation initiation factor 3, subunit 4 delta, 44kDa; eukaryotic translation initiation factor 3, subunit G

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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

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