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EIF3K Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16788b

Product Information

Application	WB, E
Primary Accession	Q9UBQ5
Other Accession	Q9DBZ5, Q3T0V3, NP_037366.1
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35950
Calculated MW	25060
Antigen Region	176-204

Additional Information

Gene ID	27335
Other Names	Eukaryotic translation initiation factor 3 subunit K {ECO:0000255|HAMAP-Rule:MF_03010}, eIF3k {ECO:0000255|HAMAP-Rule:MF_03010}, Eukaryotic translation initiation factor 3 subunit 12 {ECO:0000255|HAMAP-Rule:MF_03010}, Muscle-specific gene M9 protein, PLAC-24, eIF-3 p25 {ECO:0000255|HAMAP-Rule:MF_03010}, eIF-3 p28, EIF3K {ECO:0000255|HAMAP-Rule:MF_03010}
Target/Specificity	This EIF3K antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 176-204 amino acids from the C-terminal region of human EIF3K.
Dilution	WB~~1:1000 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	EIF3K Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF3K {ECO:0000255|HAMAP-Rule:MF_03010}
Function	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).
Cellular Location	Nucleus {ECO:0000255|HAMAP-Rule:MF_03010, ECO:0000269|PubMed:15327989}. Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03010, ECO:0000269|PubMed:15327989}
Tissue Location	Ubiquitous, with the highest levels of expression in brain, testis and kidney.

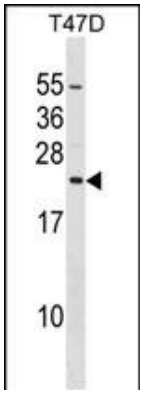
Background

The 700-kD eukaryotic translation initiation factor-3 (eIF3) is the largest eIF and contains at least 12 subunits, including EIF2S12. eIF3 plays an essential role in translation by binding directly to the 40S ribosomal subunit and promoting formation of the 40S preinitiation complex (Mayeur et al., 2003 [PubMed 14519125]).

References

Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 105(47):18139-18144(2008)
Lin, Y.M., et al. J. Cell. Sci. 121 (PT 14), 2382-2393 (2008) :
Masutani, M., et al. EMBO J. 26(14):3373-3383(2007)
Damoc, E., et al. Mol. Cell Proteomics 6(7):1135-1146(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images



EIF3K Antibody (C-term) (Cat. #AP16788b) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the EIF3K antibody detected the EIF3K protein (arrow).

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