10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EIF3E Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19409c

Product Information

Application	WB, E
Primary Accession	P60228
Other Accession	Q641X8, P60229, Q4R6G8, Q5ZLA5, Q3T102, Q3B8M3, Q1LUA8, Q05AY2, Q6DRI1, NP_001559.1
Reactivity	Human, Zebrafish
Predicted	Zebrafish, Xenopus, Bovine, Chicken, Monkey, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52221
Antigen Region	248-276

Additional Information

Gene ID	3646
Other Names	Eukaryotic translation initiation factor 3 subunit E {ECO:0000255|HAMAP-Rule:MF_03004}, eIF3e {ECO:0000255|HAMAP-Rule:MF_03004}, Eukaryotic translation initiation factor 3 subunit 6 {ECO:0000255|HAMAP-Rule:MF_03004}, Viral integration site protein INT-6 homolog, eIF-3 p48 {ECO:0000255|HAMAP-Rule:MF_03004}, EIF3E {ECO:0000255|HAMAP-Rule:MF_03004}
Target/Specificity	This EIF3E antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 248-276 amino acids from the Central region of human EIF3E.
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	EIF3E Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF3E {ECO:0000255|HAMAP-Rule:MF_03004}
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). Required for nonsense-mediated mRNA decay (NMD); may act in conjunction with UPF2 to divert mRNAs from translation to the NMD pathway (PubMed:17468741). May interact with MCM7 and EPAS1 and regulate the proteasome-mediated degradation of these proteins (PubMed:17310990, PubMed:17324924).
Cellular Location	Cytoplasm. Nucleus, PML body.
Tissue Location	Ubiquitously expressed. Expressed at highest levels in appendix, lymph, pancreas, skeletal muscle, spleen and thymus

Background

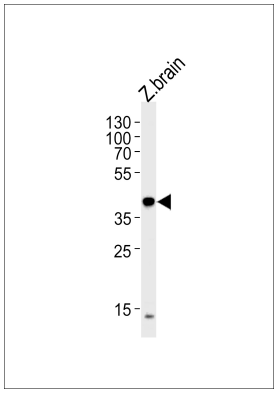
Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 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. Required for nonsense-mediated mRNA decay (NMD); may act in conjunction with UPF2 to divert mRNAs from translation to the NMD pathway. May interact with MCM7 and EPAS1 and regulate the proteasome-mediated degradation of these proteins.

References

Grzmil, M., et al. Oncogene 29(28):4080-4089(2010)
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)
Morris, C., et al. EMBO Rep. 8(6):596-602(2007)
Sirchia, R., et al. Biol. Chem. 388(5):457-465(2007)

Images

DANRE eif3eb Antibody (Center) (Cat. #AP19409c) western blot analysis in zebra fish brain tissue lysates (35ug/lane).This demonstrates the DANRE eif3eb antibody detected the DANRE eif3eb protein (arrow).



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