

EIF3E Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19409c

Product Information

Application WB, E Primary Accession P60228

Other Accession <u>0641X8, P60229, Q4R6G8, Q5ZLA5, Q3T102, Q3B8M3, Q1LUA8, Q05AY2,</u>

Q6DRI1, NP_001559.1

Reactivity Human, Zebrafish

Predicted Zebrafish, Xenopus, Bovine, Chicken, Monkey, Mouse, Rat

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

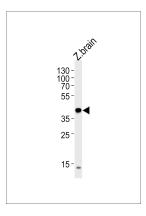
Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 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'.