

EIF3E Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19409c

Specification

EIF3E Antibody(Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted

Host Clonality Isotype Calculated MW Antigen Region WB,E P60228 Q641X8, P60229, Q4R6G8, Q5ZLA5, Q3T102, Q3B8M3, Q1LUA8, Q05AY2, Q6DR11, NP_001559.1 Human, Zebrafish Xenopus, Bovine, Chicken, Monkey, Mouse, Rat Rabbit Polyclonal Rabbit IgG 52221 248-276

EIF3E Antibody(Center) - 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.



EIF3E Antibody(Center) - 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:<u>17581632</u>, PubMed:<u>25849773</u>, PubMed:<u>27462815</u>). 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:<u>17581632</u>). 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:<u>25849773</u>). Required for nonsense-mediated mRNA decay (NMD); may act in conjunction with UPF2 to divert mRNAs from translation to the NMD pathway (PubMed:<u>17468741</u>). May interact with MCM7 and EPAS1 and regulate the proteasome-mediated degradation of these proteins (PubMed:<u>17310990</u>, PubMed:<u>17324924</u>).

Cellular Location Cytoplasm. Nucleus, PML body.

Tissue Location Ubiquitously expressed. Expressed at highest levels in appendix, lymph, pancreas, skeletal muscle, spleen and thymus

EIF3E Antibody(Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EIF3E Antibody(Center) - Images





EIF3E Antibody (Center)(Cat. #AP19409c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the EIF3E antibody detected the EIF3E protein (arrow).



(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).

EIF3E 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. 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.

EIF3E Antibody(Center) - 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)