

EIF3E Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19409c

Specification

EIF3E Antibody(Center) - Product Information

Application WB,E
Primary Accession P60228

Other Accession <u>Q641X8</u>, <u>P60229</u>, <u>Q4R6G8</u>, <u>Q5ZLA5</u>, <u>Q3T102</u>,

Q3B8M3, **Q1LUA8**, **Q05AY2**, **Q6DRI1**,

NP 001559.1

Reactivity Human, Zebrafish

Predicted Xenopus, Bovine, Chicken, Monkey, Mouse,

Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 52221
Antigen Region 248-276

EIF3E Antibody(Center) - Additional Information

Gene ID 3646

Other Names

Eukaryotic translation initiation factor 3 subunit E $\{ECO:0000255|HAMAP-Rule:MF_03004\}$, elF3e $\{ECO:0000255|HAMAP-Rule:MF_03004\}$, Eukaryotic translation initiation factor 3 subunit 6 $\{ECO:0000255|HAMAP-Rule:MF_03004\}$, Viral integration site protein INT-6 homolog, elF-3 p48 $\{ECO:0000255|HAMAP-Rule:MF_03004\}$, ElF3E $\{ECO:0000255|HAMAP-Rule:MF_03004\}$

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: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

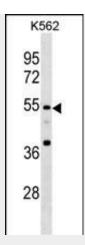
EIF3E Antibody(Center) - Protocols

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

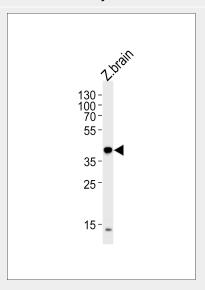
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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)