

EIF3E Antibody(Center) Blocking peptide

Synthetic peptide Catalog # BP19409c

Specification

EIF3E Antibody(Center) Blocking peptide -Product Information

Primary Accession P60228

EIF3E Antibody(Center) Blocking peptide -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}

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EIF3E Antibody(Center) Blocking peptide -Protein Information

Name EIF3E {ECO:0000255|HAMAP-Rule:MF_03004}

EIF3E Antibody(Center) Blocking peptide -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) Blocking peptide -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)



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) Blocking peptide -Protocols

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

Blocking Peptides