

Anti-EIF3e Picoband Antibody
Catalog # ABO10082**Specification**

Anti-EIF3e Picoband Antibody - Product Information

Application	WB
Primary Accession	P60228
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Eukaryotic translation initiation factor 3 subunit E (EIF3E) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-EIF3e Picoband Antibody - 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}

Calculated MW

52221 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm. Nucleus, PML body.

Tissue Specificity

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

Protein Name

Eukaryotic translation initiation factor 3 subunit E

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human EIF3e recombinant protein (Position: A160-Q241). Human EIF3e shares 100%

amino acid (aa) sequence identity with both mouse and rat EIF3e.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-EIF3e Picoband Antibody - 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-tRNA_i 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

Anti-EIF3e Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EIF3e Picoband Antibody - Images

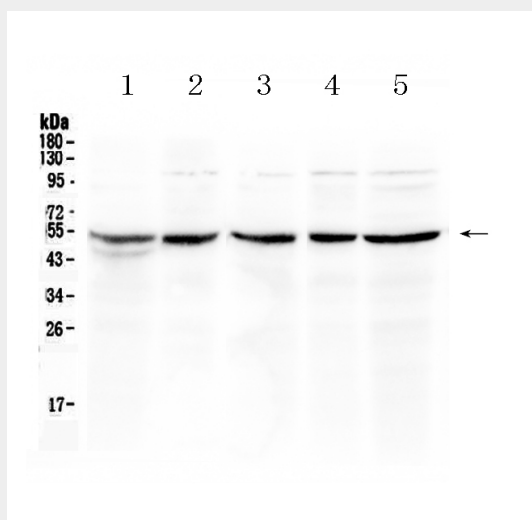


Figure 1. Western blot analysis of EIF3e using anti- EIF3e antibody (ABO10082). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat thymus tissue lysates, Lane 2: mouse thymus tissue lysates, Lane 3: mouse spleen tissue lysates, Lane 4: COLO320 whole cell lysates, Lane 5: HELA whole Cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- EIF3e antigen affinity purified polyclonal antibody (Catalog # ABO10082) at 0.5 μ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for EIF3e at approximately 52KD. The expected band size for EIF3e is at 52KD.

Anti-EIF3e Picoband Antibody - Background

Eukaryotic translation initiation factor 3 subunit E is a protein that in humans is encoded by the EIF3E gene. The human homolog of EIF3E is located on chromosome region 8q22-q23. It is composed of 13 exons that span 45 kb of genomic DNA. EIF3E is the component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis its localization/assembly. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNA_i and eIF-5 to form the 43S pre-initiation complex (43S PIC). And 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.