

eIF3K Polyclonal Antibody

Catalog # AP69693

Product Information

Application WB
Primary Accession Q9UBO5

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW25060

Additional Information

Gene ID 27335

Other Names EIF3K; EIF3S12; ARG134; HSPC029; MSTP001; PTD001; Eukaryotic translation

initiation factor 3 subunit K; eIF3k; Eukaryotic translation initiation factor 3 subunit 12; Muscle-specific gene M9 protein; PLAC-24; eIF-3 p25; eIF-3 p28

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name EIF3K {ECO:0000255 | HAMAP-Rule:MF_03010}

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:<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: 25849773).

Cellular Location Nucleus {ECO:0000255 | HAMAP-Rule:MF_03010,

ECO:0000269 | PubMed:15327989 }. Cytoplasm {ECO:0000255 | HAMAP-

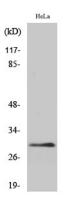
Rule:MF_03010, ECO:0000269 | PubMed:15327989}

Tissue Location Ubiquitous, with the highest levels of expression in brain, testis and kidney.

Background

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).

Images



Western Blot analysis of various cells using eIF3K Polyclonal Antibody diluted at 1: 1000

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