

eIF3K Polyclonal Antibody

Catalog # AP69693

Product Information

Application	WB
Primary Accession	Q9UBQ5
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25060

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	<p>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).</p>

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-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](#)).

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.