

# Rabbit Anti-elF3K antibody

## SL12057R

Product Name:	eIF3K
Chinese Name:	真核翻译起始因子3K抗体
Alias:	ARG134; eIF 3 p25; eIF 3 p28; eIF-3 p25; eIF-3 p28; EIF3-p28; eIF3k; eif3k; EIF3K_HUMAN; EIF3S12; Eukaryotic translation initiation factor 3 subunit 12; Eukaryotic translation initiation factor 3 subunit K; HSPC029; M9; MSTP001; Muscle specific gene M9 protein; Muscle-specific gene M9 protein; PLAC 24; PLAC-24; PLAC24; PRO1474; PTD001; EIF3K_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	25kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human eIF3K:121-218/218
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	eIF3K (Eukaryotic translation initiation factor 3 subunit K, Muscle-specific gene M9 protein) is a widely expressed translation initiation factor that belongs to the eIF3 subunit K family. Translation initiation factor 3 (eIF3) is a multisubunit complex

containing at least 12 subunits. eIF3 binds to the 40S ribosomal subunit, promotes the binding of methionyl-tRNAi and mRNA, and interacts with several other initiation factors to form the 40S initiation complex. eIF3K is the smallest subunit of eIF3 and it interacts with several other subunits of eIF3 and the 40S ribosomal subunit. eIF3K is conserved among high eukaryotes, including mammals, insects, and plants, and it is ubiquitously expressed in human tissues. eIF3K is distributed both in nucleus and cytoplasm and colocalizes with cyclin D3, a regulatory subunit of cyclin-dependent kinase 4 (Cdk4).

#### **Function:**

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 post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation.

#### Subunit:

Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is composed of 13 subunits: EIF3A, EIF3B, EIF3C, EIF3D, EIF3E, EIF3F, EIF3G, EIF3H, EIF3I, EIF3J, EIF3K, EIF3L and EIF3M. The eIF-3 complex appears to include 3 stable modules: module A is composed of EIF3A, EIF3B, EIF3G and EIF3I; module B is composed of EIF3F, EIF3H, and EIF3M; and module C is composed of EIF3C, EIF3D, EIF3E, EIF3K and EIF3L. EIF3C of module C binds EIF3B of module A and EIF3H of module B, thereby linking the three modules. EIF3J is a labile subunit that binds to the eIF-3 complex via EIF3B. The eIF-3 complex interacts with RPS6KB1 under conditions of nutrient depletion. Mitogenic stimulation leads to binding and activation of a complex composed of MTOR and RPTOR, leading to phosphorylation and release of RPS6KB1 and binding of EIF4B to eIF-3. Interacts with CCND3, but not with CCND1 and CCND2.

#### Subcellular Location:

Nucleus. Cytoplasm.

## Tissue Specificity:

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

#### Similarity:

Belongs to the eIF-3 subunit K family.

#### **SWISS:**

Q9UBQ5

#### Gene ID:

27335

### **Database links:**

Entrez Gene: 515326Cow

Entrez Gene: 27335Human

Entrez Gene: 73830 Mouse

Entrez Gene: 444341 Xenopus laevis

Entrez Gene: 550245Zebrafish

Omim: 609596Human

SwissProt: Q3T0V3Cow

SwissProt: Q9UBQ5Human

SwissProt: Q9DBZ5Mouse

SwissProt: Q6GNI4Xenopus laevis

SwissProt: Q567V6Zebrafish

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.