

# Rabbit Anti-elF3B antibody

## SL14542R

Product Name:	eIF3B
Chinese Name:	eIF3B蛋白抗体
Alias:	eIF-3-eta; eIF3 eta; eIF3 p110; eIF3 p116; EIF3-ETA; EIF3-P110; EIF3-P116; eIF3b; EIF3B_HUMAN; EIF3S9; Eukaryotic translation initiation factor 3, subunit B; Eukaryotic translation initiation factor 3 subunit 9; eukaryotic translation initiation factor 3 subunit 9 eta; Eukaryotic translation initiation factor 3 subunit B; hPrt1; PRT1; Prt1 homolog.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=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:	92kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human eIF3B:701-814/814
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:	<u>PubMed</u>
Product Detail:	eIF3b expression relates to human bladder and prostate cancer prognosis, is required for tumor growth, and thus a candidate therapeutic target. The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and

RNA molecules. Association of eIF3 proteins with the 40S ribosomal subunit stabilizes eIF2-GTP-Met-tRNAiMet complex association and mRNA binding, and promotes dissociation of 80S ribosomes into 40S and 60S subunits, thereby promoting the assembly of the pre-initiation complex. Overexpression of eIF3 proteins is common in several cancers, suggesting a role for eIF3 proteins in tumorigenesis.

#### 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. Also interacts with UPF2.

#### Subcellular Location:

Cytoplasm.

#### Post-translational modifications:

Phosphorylated. Phosphorylation is enhanced upon serum stimulation.

#### Similarity:

Belongs to the eIF-3 subunit B family.

Contains 1 RRM (RNA recognition motif) domain.

Contains 5 WD repeats.

#### **SWISS:**

P55884

#### Gene ID:

8662

### **Database links:**

Entrez Gene: 8662 Human

Entrez Gene: 27979 Mouse

Entrez Gene: 288516 Rat

Omim: 603917 Human

SwissProt: P55884 Human

SwissProt: Q8JZQ9 Mouse

SwissProt: Q4G061 Rat

Unigene: 371001 Human

Unigene: 21671 Mouse

Unigene: 2829 Rat

## **Important Note:**

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