

Full-Length

EIF4E (Human) Recombinant Protein (P01)

Catalog # H00001977-P01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human EIF4E full-length ORF (AAH12611, 1 a.a 217 a.a.) recombinant protein with GST-tag at N-t erminal.
Sequence	MATVEPETTPTPNPPTTEEEKTESNQEVANPEHYIKHPLQNRWALWFFKNDKSKTWQANLRLISK FDTVEDFWALYNHIQLSSNLMPGCDYSLFKDGIEPMWEDEKNKRGGRWLITLNKQQRRSDLNRF WLETLLCLIGESFDDYSDDVCGAVVNVRAKGDKIAIWTTECENREAVTHIGRVYKERLGLPPKIVIG YQSHADTATKSGSTTKNRFVV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	49.61
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — EIF4E	
Entrez GenelD	<u>1977</u>
GeneBank Accession#	BC012611
Protein Accession#	<u>AAH12611</u>
Gene Name	EIF4E
Gene Alias	CBP, EIF4E1, EIF4EL1, EIF4F, MGC111573
Gene Description	eukaryotic translation initiation factor 4E
Omim ID	<u>133440</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	All eukaryotic cellular mRNAs are blocked at their 5-prime ends with the 7-methylguanosine cap s tructure, m7GpppX (where X is any nucleotide). This structure is involved in several cellular proce sses including enhanced translational efficiency, splicing, mRNA stability, and RNA nuclear export . EIF4E is a eukaryotic translation initiation factor involved in directing ribosomes to the cap struct ure of mRNAs. It is a 24-kD polypeptide that exists as both a free form and as part of a multiprotein complex termed EIF4F. The EIF4E polypeptide is the rate-limiting component of the eukaryotic translation apparatus and is involved in the mRNA-ribosome binding step of eukaryotic protein synthesis. The other subunits of EIF4F are a 50-kD polypeptide, termed EIF4A (see MIM 601102), that possesses ATPase and RNA helicase activities, and a 220-kD polypeptide, EIF4G (MIM 6004 95) (Rychlik et al., 1987 [PubMed 3469651]).[supplied by OMIM
Other Designations	elF-4F 25 kDa subunit eukaryotic translation initiation factor 4E-like 1 mRNA cap-binding protein

Publication Reference



Product Information

 Heat shock protein 27 confers resistance to androgen ablation and chemotherapy in prostate cancer cells through eIF4E.

Andrieu C, Taieb D, Baylot V, Ettinger S, Soubeyran P, De-Thonel A, Nelson C, Garrido C, So A, Fazli L, Bladou F, Gleave M, Iovanna JL, Rocchi P.

Oncogene 2010 Apr; 29(13):1883.

Application: PI, WB-Re, Recombinant proteins

Pathway

- Insulin signaling pathway
- mTOR signaling pathway

Disease

• Tobacco Use Disorder