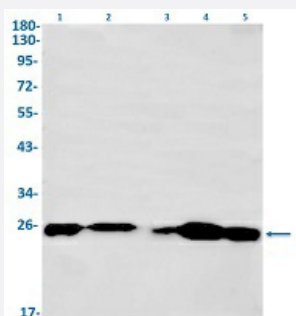


RecomAb™

EIF4E recombinant monoclonal antibody, clone R04-4H7

Catalog # RAB02306 Size 100 uL

Applications



Western Blot

Western Blot analysis of Lane 1: K562, Lane 2: rat brain, Lane 3: C6, Lane 4: 3T3 and Lane 5: HeLa lysates with EIF4E recombinant monoclonal antibody, clone R04-4H7 (Cat # RAB02306).

Specification

| | |
|-----------------------------|---|
| Product Description | Rabbit recombinant monoclonal antibody raised against human EIF4E. |
| Antibody Species | Rabbit |
| Immunogen | Original antibody is raised against a synthetic peptide corresponding to human EIF4E. |
| Theoretical MW (kDa) | Calculated MW: 25 kD |
| Reactivity | Human, Mouse, Rat |
| Form | Liquid |
| Purification | Affinity purification |
| Isotype | IgG |
| Recommend Usage | Immunohistochemistry (1:50-1:100) Immunoprecipitation(1:20) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user. |
| Storage Buffer | In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA) |

Storage Instruction

Store at -20 °C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot

Western Blot analysis of Lane 1: K562, Lane 2: rat brain, Lane 3: C6, Lane 4: 3T3 and Lane 5: Hela lysates with EIF4E recombinant monoclonal antibody, clone R04-4H7 (Cat # RAB02306).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

- Immunoprecipitation

Gene Info — EIF4E

Entrez GeneID[1977](#)**Protein Accession#**[P06730](#)**Gene Name**

EIF4E

Gene Alias

CBP, EIF4E1, EIF4EL1, EIF4F, MGC111573

Gene Description

eukaryotic translation initiation factor 4E

Omim ID[133440](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

All eukaryotic cellular mRNAs are blocked at their 5-prime ends with the 7-methylguanosine cap structure, m7GpppX (where X is any nucleotide). This structure is involved in several cellular processes 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 structure 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 600495) (Rychlik et al., 1987 [PubMed 3469651]).[supplied by OMIM]

Other Designations

eIF-4F 25 kDa subunit|eukaryotic translation initiation factor 4E-like 1|mRNA cap-binding protein

Pathway

- [Insulin signaling pathway](#)
- [mTOR signaling pathway](#)

Disease

- [Tobacco Use Disorder](#)