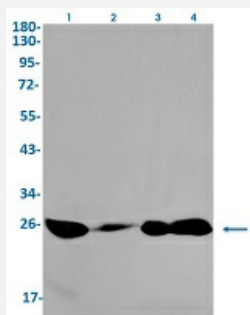


RecomAb™

EIF4E (phospho Ser209) recombinant monoclonal antibody, clone R04-5A4

Catalog # RAB02308 Size 100 uL

Applications



Western Blot

Western Blot analysis of Lane 1: K562, Lane 2: rat brain, Lane 3: C6 and Lane 4: 3T3 lysates with EIF4E (phospho Ser209) recombinant monoclonal antibody, clone R04-5A4 (Cat # RAB02308).

Specification

| | |
|-----------------------------|---|
| Product Description | Rabbit recombinant monoclonal antibody raised against human EIF4E. |
| Antibody Species | Rabbit |
| Immunogen | Original antibody is raised against a synthetic phosphopeptide corresponding to residues surrounding Ser209 of human EIF4E. |
| Theoretical MW (kDa) | Calculated MW: 25 kD |
| Reactivity | Human, Mouse, Rat |
| Form | Liquid |
| Purification | Affinity purification |
| Isotype | IgG |

| | |
|----------------------------|---|
| Recommend Usage | Immunofluorescence (1:50-1:200) 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 and Lane 4: 3T3 lysates with EIF4E (phospho Ser209) recombinant monoclonal antibody, clone R04-5A4 (Cat # RAB02308).

- Immunohistochemistry

- Immunofluorescence

- 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](#)