

Product datasheet for **CF503042**

EIF4E Mouse Monoclonal Antibody [Clone ID: OTI5D11]

Product data:

| | |
|-------------------------|--|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI5D11 |
| Applications: | FC, IHC, WB |
| Recommended Dilution: | WB 1:2000, IHC 1:150 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human EIF4E(NP_001959) produced in HEK293T cell. |
| Formulation: | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| Reconstitution Method: | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 24.9 kDa |
| Gene Name: | eukaryotic translation initiation factor 4E |
| Database Link: | NP_001959 Entrez Gene 13684 Mouse Entrez Gene 117045 Rat Entrez Gene 1977 Human P06730 |



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Background:

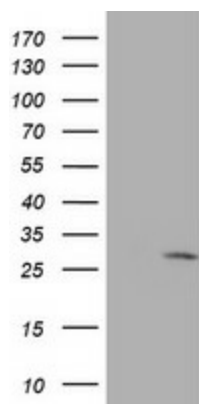
All eukaryotic cellular mRNAs are blocked at their 5-prime ends with the 7-methylguanosine cap structure, m⁷GpppX (where X is any nucleotide). This structure is involved in several cellular processes including enhanced translational efficiency, splicing, mRNA stability, and RNA nuclear export. EIF4E 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]

Synonyms:

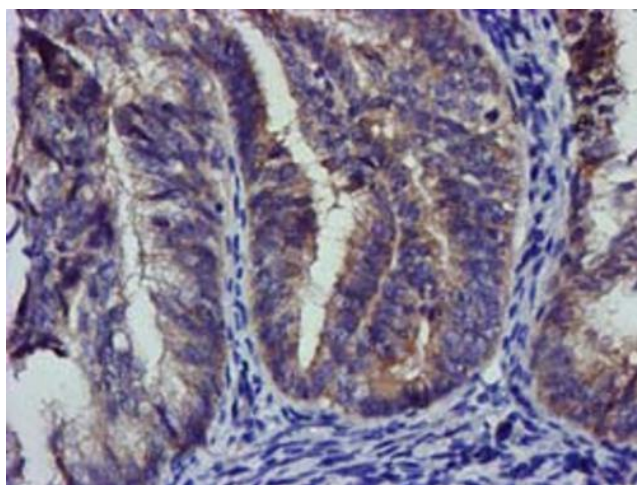
AUTS19; CBP; eIF-4E; EIF4E1; EIF4EL1; EIF4F

Protein Pathways:

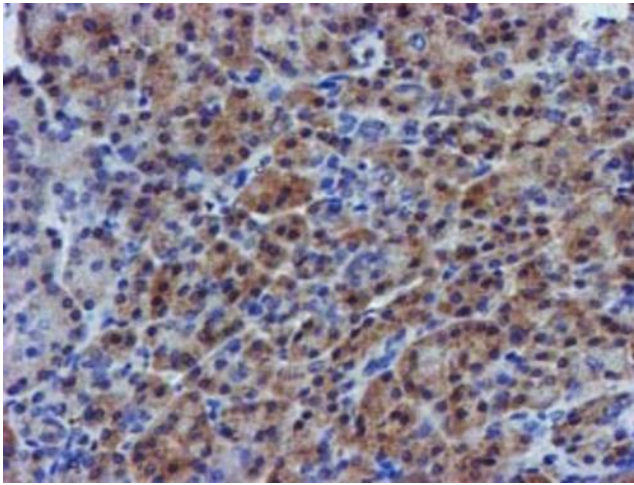
Insulin signaling pathway, mTOR signaling pathway

Product images:

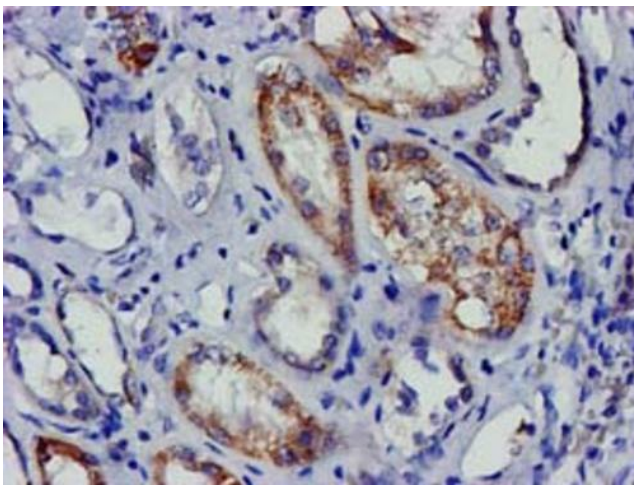
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EIF4E (Cat# [RC207333], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF4E (Cat# [TA503042]). Positive lysates [LY400723] (100ug) and [LC400723] (20ug) can be purchased separately from OriGene.



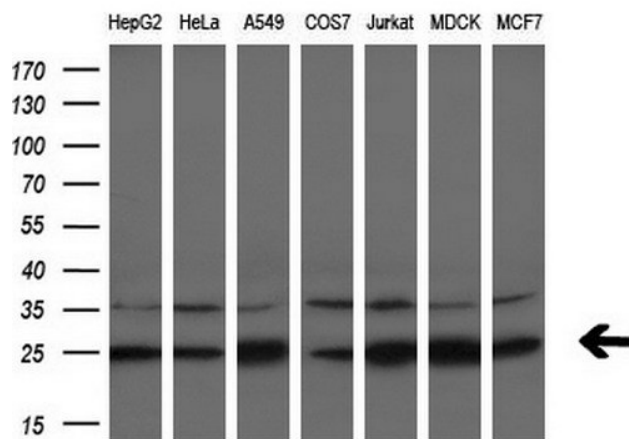
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-EIF4E mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



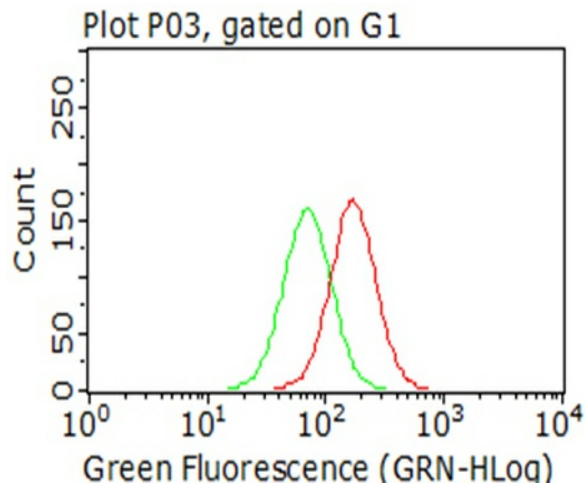
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-EIF4E mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



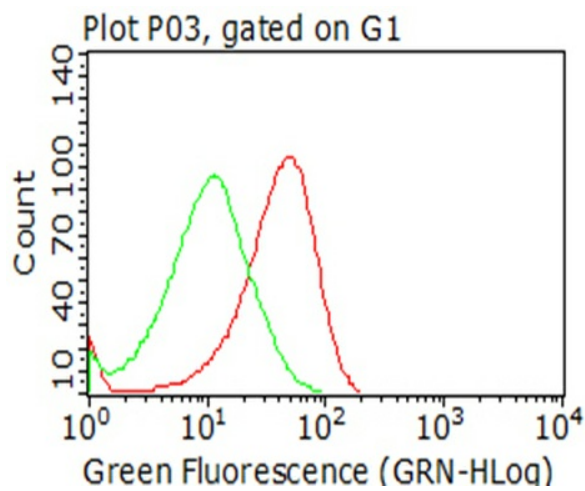
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-EIF4E mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Western blot analysis of extracts (10ug) from 7 different cell lines by using anti-EIF4E monoclonal antibody (1:200).



Flow cytometric Analysis of permeabilized A549 cells, using anti-EIF4E antibody ([TA503042]), (Red), compared to an IgG isotype control, (green) (1:100).



Flow cytometric Analysis of permeabilized Jurkat cells, using anti-EIF4E antibody ([TA503042]), (Red), compared to an IgG isotype control, (green) (1:100).