

Product datasheet for TA502896AM

OriGene Technologies, Inc.

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EIF4E Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI6C3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI6C3

Applications: FC, IHC, WB

Recommended Dilution: WB 1:500, 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: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

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 MouseEntrez Gene 117045 RatEntrez Gene 1977 Human

P06730





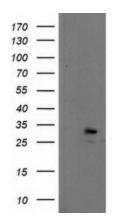
Background:

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]

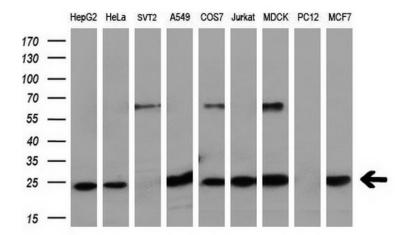
Synonyms: AUTS19; CBP; eIF-4E; EIF4E1; EIF4EL1; EIF4F

Protein Pathways: Insulin signaling pathway, mTOR signaling pathway

Product images:

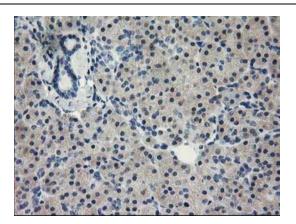


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY EIF4E ([RC207333], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF4E. Positive lysates [LY400723] (100ug) and [LC400723]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

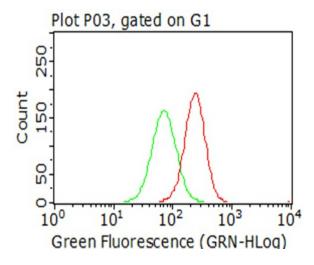


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-EIF4E monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

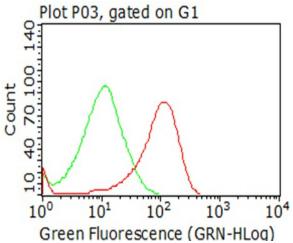




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-EIF4E mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502896])



Flow cytometric Analysis of fixed permeabilized cells, using anti-EIF4E antibody ([TA502896]), (Red), compared to an IgG isotype control, (green), and negative control (PBS), (Blue) (1:100).



Flow cytometric Analysis of permeabilized Jurkat cells, using anti-EIF4E antibody ([TA502896]), (Red), compared to an IgG isotype control, (green) (1:100).