

### Product datasheet for TA503042AM

#### OriGene Technologies, Inc.

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# EIF4E Mouse Monoclonal Antibody (Biotin conjugated) [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:** 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

**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 MouseEntrez Gene 117045 RatEntrez Gene 1977 Human

P06730





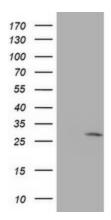
#### Background:

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]

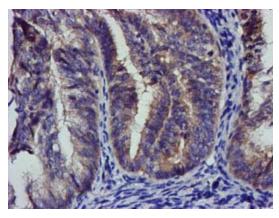
Synonyms: AUTS19; CBP; eIF-4E; EIF4E1; EIF4EL1; EIF4F

**Protein Pathways:** Insulin signaling pathway, mTOR signaling pathway

# **Product images:**

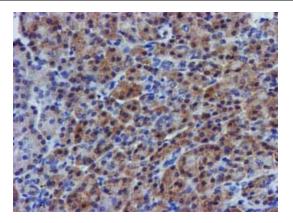


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EIF4E (Cat# [RC207333], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF4E(Cat# [TA503042]). Positive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

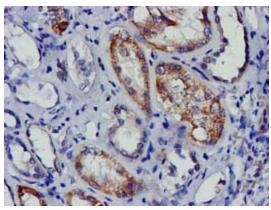


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-EIF4E mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503042])

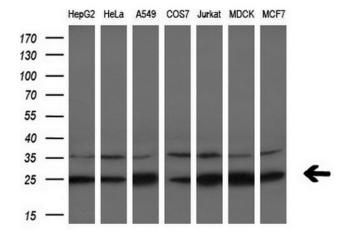




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-EIF4E mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503042])

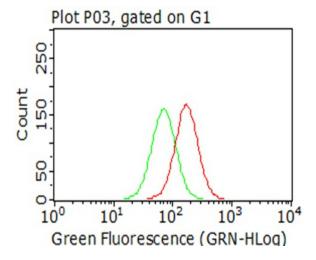


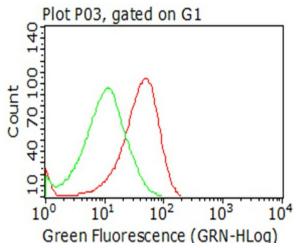
Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-EIF4E mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503042])



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).