

### OriGene Technologies, Inc.

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# Product datasheet for TA501313AM

## elF2 alpha (EIF2S1) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI3H4]

### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	OTI3H4
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:1000~2000, IHC 1:50, IF 1:100, FLOW 1:100
Reactivity:	Human, Dog, Rat, Monkey, Mouse
Host:	Mouse
lsotype:	lgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human EIF2S1 (NP_004085) 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:	35.9 kDa
Gene Name:	eukaryotic translation initiation factor 2 subunit alpha
Database Link:	<u>NP_004085</u> <u>Entrez Gene 13665 MouseEntrez Gene 54318 RatEntrez Gene 480361 DogEntrez Gene 710150</u> <u>MonkeyEntrez Gene 1965 Human</u> <u>P05198</u>



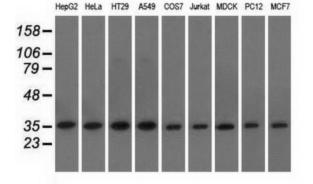
### elF2 alpha (ElF2S1) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI3H4] – TA501313AM

# Background:The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis<br/>initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding<br/>occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3<br/>nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit<br/>(EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of<br/>formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha<br/>(Ernst et al., 1987 [PubMed 2948954]). [supplied by OMIM]

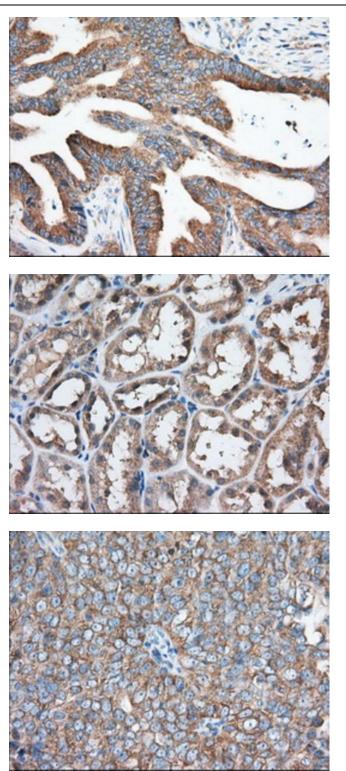
Synonyms: EIF-2; EIF-2A; EIF-2alpha; EIF2; EIF2A

### **Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY EIF2S1 ([RC200368], 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-EIF2S1. Positive lysates [LY401321] (100ug) and [LC401321] (20ug) can be purchased separately from OriGene.



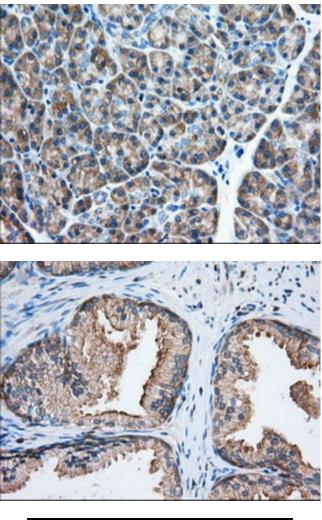
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-EIF2S1 monoclonal antibody.



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-EIF2S1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501313], Dilution 1:50)

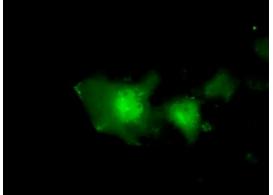
Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-EIF2S1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501313], Dilution 1:50)

Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-EIF2S1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501313], Dilution 1:50)



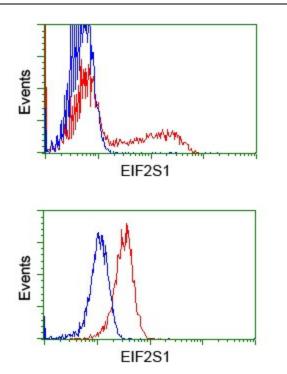
Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-EIF2S1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501313], Dilution 1:50)

Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-EIF2S1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501313], Dilution 1:50)



Anti-EIF2S1 mouse monoclonal antibody ([TA501313]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY EIF2S1 ([RC200368]).





HEK293T cells transfected with either [RC200368] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-EIF2S1 antibody ([TA501313]), and then analyzed by flow cytometry.

Flow cytometric Analysis of Jurkat cells, using anti-EIF2S1 antibody ([TA501313]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).