

[KD Validated] Anti-EIF4E Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

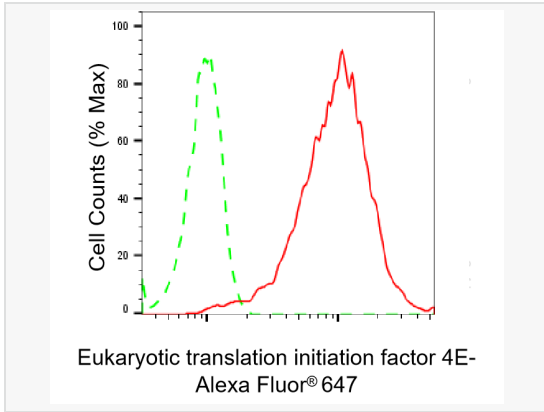
Catalog # R021425

Product Information

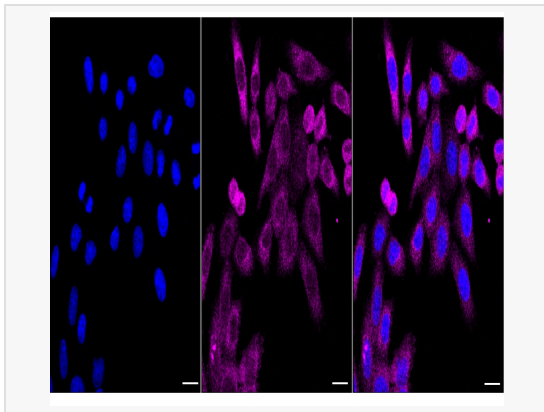
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	37S02A12
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human EIF4E
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-EIF4E Rabbit mAb [37S02A12] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

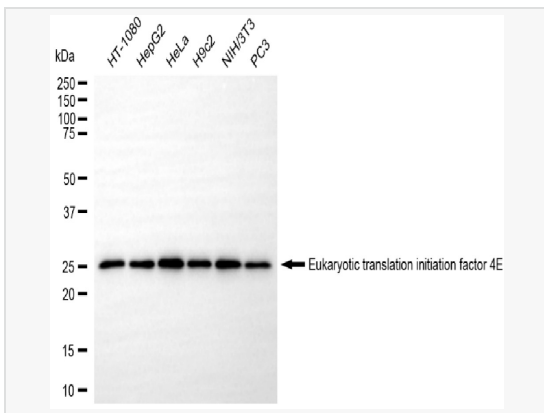
Synonyms	EIF4E; Eukaryotic Translation Initiation Factor 4E; EIF4EL1; EIF4E1; EIF4F; MRNA Cap-Binding Protein; EIF-4F 25 KDa Subunit; EIF-4E; Eukaryotic Translation Initiation Factor 4E-Like 1; AUTS19; EIF4E; CBP.
Calculated MW	Calculated MW: 25 kDa, Observed MW: 25 kDa
Uniprot ID	P06730
Gene ID	1977
Background	eIF4E, a protein modulates translation of maternal mRNAs in early embryos before the onset of zygotic transcription. eIF4E also influences the overall rate of translation. eIF4E binds to the 7 methyl GTP cap structure of eukaryotic mRNAs. Phosphorylation of eIF4E on serine 209 regulates the affinity of this protein for the 7 methyl GTP cap and/or RNA. Phosphorylation also enhances the interaction of eIF4E with eIF4G, which form a complex known as eIF4F. eIF4E phosphorylation is correlated with increased translational rate in a number of cell types.



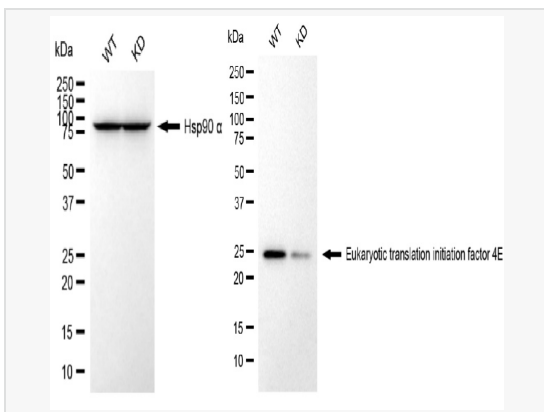
Flow cytometric analysis of Eukaryotic translation initiation factor 4E expression in HepG2 cells using Eukaryotic translation initiation factor 4E antibody (R021425, 1:2,000). Green, isotype control; red, Eukaryotic translation initiation factor 4E.



Immunocytochemical staining of HepG2 cells with Eukaryotic translation initiation factor 4E antibody (R021425, 1:1,000). Nuclei were stained blue with DAPI; Eukaryotic translation initiation factor 4E was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Western blotting analysis using eukaryotic translation initiation factor 4E antibody (R021425). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with eukaryotic translation initiation factor 4E antibody (R021425, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using eukaryotic translation initiation factor 4E antibody (R021425). Eukaryotic translation initiation factor 4E expression in wild type (WT) and eukaryotic translation initiation factor 4E (EIF4E) knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with eukaryotic translation initiation factor 4E antibody (R021425, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.