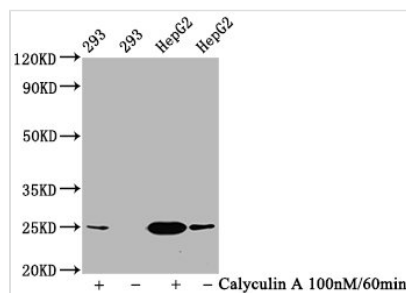




Phospho-EIF4E (S209) Recombinant Monoclonal Antibody

Product Code	CSB-RA007556A209phHU
Abbreviation	Eukaryotic translation initiation factor 4E
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P06730
Immunogen	A synthesized peptide derived from Human Phospho-EIF4E (S209)
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures. Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1 complex this subunit mediates the binding to the mRNA cap.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Eukaryotic translation initiation factor 4E, eIF-4E, eIF4E, eIF-4F 25 kDa subunit, mRNA cap-binding protein, EIF4E, EIF4EL1, EIF4F
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	EIF4E
Clone No.	1F3

Image



Western Blot

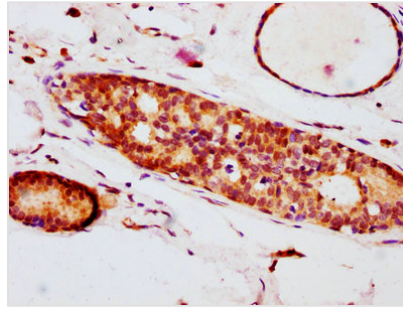
Positive WB detected in 293 whole cell lysate, HepG2 whole cell lysate (treated with Calyculin A or not)

All lanes Phospho-EIF4E antibody at 1.2µg/ml
Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 25 KDa

Observed band size: 25 KDa



IHC image of CSB-RA007556A209phHU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Description

The DNA sequence of the phospho-EIF4E (S209) monoclonal antibody was obtained by CUSABIO from splenocytes isolated from animals with human EIF4E phosphopeptide (S209) immunization. The DNA sequence was cloned into the plasmid and then transfected into cell lines for in vitro expression. The product is the phospho-EIF4E (S209) recombinant monoclonal antibody. It's an affinity-chromatography purified rabbit IgG antibody. This phospho-EIF4E (S209) antibody detects the phospho-EIF4E (S209) protein from human sources in ELISA, WB, and IHC applications.

EIF4E plays an essential role in the efficient translation of the vast majority of capped cellular mRNAs. It functions as a nucleation location for the construction of the 48S preinitiation complex by binding to the 5'-methylated guanosine cap of mRNA. EIF4E is overexpressed in numerous epithelial tumors and regulates the translation of multiple malignancy-associated mRNAs. Phosphorylation of EIF4E at serine 209 has been linked to tumor growth and decreased survival in malignant melanoma, according to Julia H Carter *et al.*