
Product Name: KD-Validated Phospho-eIF4EBP1/2/3 (T46+T46+T32) Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01368**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Predicted, 13 kDa, observed, 21 kDa

Antigen Information

Gene Name	EIF4EBP1/2/3
Alternative Names	EIF4EBP1/2/3; Eukaryotic Translation Initiation Factor 4E Binding Protein 1/2/3; PHAS-I; 4E-BP1/2/3; Phosphorylated Heat- And Acid-Stable Protein Regulated By Insulin 1/2/3; Eukaryotic Translation Initiation Factor 4E-Binding Protein 1/2/3; EIF4E-Binding Protein 1/2/3; 4EBP1/2/3; BP-1/2/3
Gene ID	1978,1979,8637
SwissProt ID	Q13541,Q13542,O60516
Immunogen	A synthesized peptide derived from human Phospho-eIF4EBP1/2/3 (T46+T46+T32)

Background

EIF4EBP1: This gene encodes one member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. [provided by RefSeq, Jul 2008]

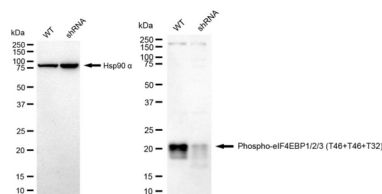
EIF4EBP2: This gene encodes a member of the eukaryotic translation initiation factor 4E binding protein family. The gene products of this family bind eIF4E and inhibit translation initiation. However, insulin and other growth factors can release this inhibition via a phosphorylation-dependent disruption of their binding to eIF4E. Regulation of protein production through these gene products have been implicated in cell proliferation, cell differentiation and viral infection. [provided by RefSeq, Oct 2008]

EIF4EBP3: This gene encodes a member of the EIF4EBP family, which consists of proteins that bind to eukaryotic translation initiation factor 4E and regulate its assembly into EIF4F, the multi-subunit translation initiation factor that recognizes the mRNA cap structure. Read-through transcription from the neighboring upstream gene (MASK or ANKHD1) generates a transcript (MASK-BP3) that encodes a protein comprised of the MASK protein sequence for the majority of the protein and a different C-terminus due to an alternate reading frame for the EIF4EBP3 segments. [provided by RefSeq, Oct 2010]

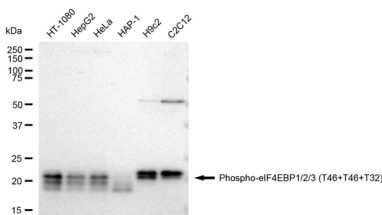
Research Area

Epigenetics and Nuclear Signaling

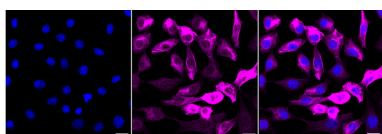
Image Data



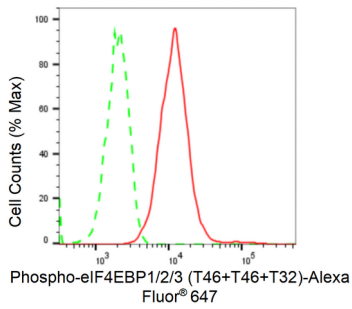
Western blotting analysis using Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368). Phospho-eIF4EBP1/2/3 (T46+T46+T32) expression in wild type (WT) and Phospho-eIF4EBP1/2/3 (T46+T46+T32) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of C2C12 cells with Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368, 1:1,000). Nuclei were stained blue with DAPI; Phospho-eIF4EBP1/2/3 (T46+T46+T32) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



Flow cytometric analysis of Phospho-eIF4EBP1/2/3 (T46+T46+T32) expression in C2C12 cells using Phospho-eIF4EBP1/2/3 (T46+T46+T32) antibody (KVA01368, 1:2,000). Green, isotype control; red, Phospho-eIF4EBP1/2/3 (T46+T46+T32).