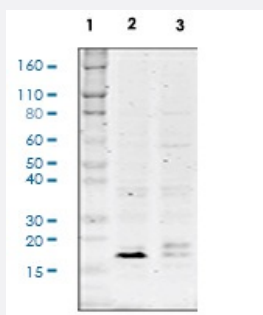


RecomAb™

EIF4EBP1 recombinant monoclonal antibody, clone 4EB1T37T46-A5

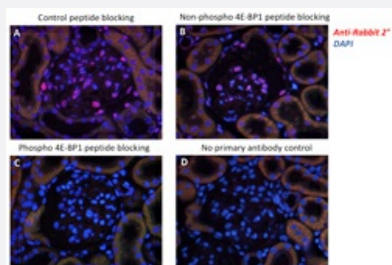
Catalog # RAB02786 Size 200 uL

Applications



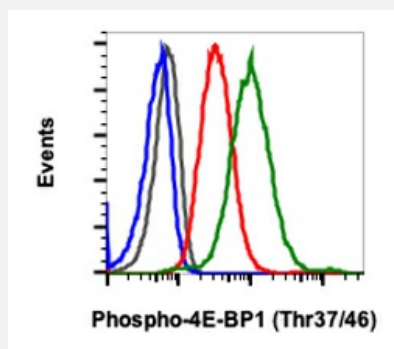
Western Blot

Western blot analysis of K562 cell extract untreated or treated with imatinib using Phospho-4E-BP1 (Thr37/Thr46) antibody 4EB1T37T46-A5 at 1 ng/mL.



Immunohistochemistry

Immunohistochemical staining of rat kidney cells including peptide blocking shows phospho-specificity for 4EB1T37T46-A5 Cat. #2041. Anti-rabbit secondary antibody staining (red) is punctate in the nuclei. Neither control peptide (A) nor non-phospho 4E-BP1 peptide (B) blocks 4EB1T37T46-A5 staining but phospho 4E-BP1 (T37/T46) peptide efficiently blocks signal (C). No signal was observed when the primary antibody is omitted (D). The central object in the field is a glomerulus with surrounding tubules sectioned in various orientations.



Flow Cytometry

Peptide blocking flow cytometric analysis of Jurkat cells LY294002 plus wortmannin plus U0126 (LWU) treated cells stained with secondary antibody as negative control (light blue) or treated with LWU (red) or treated with FBS (green) or LWU and blocked with phospho-peptide (black) or FBS and blocked with phospho peptide (gold) or LWU and blocked with non-phospho peptide (dark blue) or FBS and blocked with non-phospho peptide (purple) using Phospho-4E-BP1 (Thr37/Thr46) antibody 4EB1T37T46-A5 at 0.1 ug/mL.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human EIF4EBP1.
Antibody Species	Rabbit
Immunogen	A synthetic phospho-peptide corresponding to residues surrounding Thr37/46 of human phospho 4E-BP1.
Reactivity	Human
Form	Liquid
Purification	Protein A+G
Isotype	Rabbit IgG1k
Recommend Usage	Flow Cytometry Immunohistochemistry Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	1X PBS, 0.02% Sodium azide, 50% Glycerol, 0.1% BSA
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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Peptide blocking flow cytometric analysis of Jurkat cells LY294002 plus wortmannin plus U0126 LWU) treated cells stained with secondary antibody as negative control (light blue) or treated with LWU (red) or treated with FBS (green) or LUW and blocked with phospho-peptide (black) or FBS and blocked with phospho peptide (gold) or LUW and blocked with non-phospho peptide (dark blue) or FBS and blocked with non-phospho peptide (purple) using Phospho-4E-BP1 (Thr37/Thr46) antibody 4EB1T37T46-A5 at 0.1 ug/mL.

Gene Info — EIF4EBP1

Entrez GeneID [1978](#)

Protein Accession# [Q13541](#)

Gene Name EIF4EBP1

Gene Alias 4E-BP1, 4EBP1, BP-1, MGC4316, PHAS-I

Gene Description eukaryotic translation initiation factor 4E binding protein 1

Omim ID [602223](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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]

Other Designations eIF4E-binding protein 1|phosphorylated heat- and acid-stable protein regulated by insulin 1

Pathway

- [Acute myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Insulin signaling pathway](#)
- [mTOR signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Genetic Predisposition to Disease](#)
- [Multiple System Atrophy](#)
- [Obesity](#)