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Phospho-EIF4EBP1(S111) Antibody Blocking peptide

Synthetic peptide
Catalog # BP3473a

Specification

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Product Information

Primary Accession	Q13541
Other Accession	NP_004086

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Additional Information

Gene ID 1978

Other Names
Eukaryotic translation initiation factor 4E-binding protein 1, 4E-BP1, eIF4E-binding protein 1, Phosphorylated heat- and acid-stable protein regulated by insulin 1, PHAS-I, EIF4EBP1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP3473a was selected from the region of human Phospho-EIF4EBP1-S111. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Protein Information

Name EIF4EBP1

Function
Repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form competes with EIF4G1/EIF4G3 and strongly binds to EIF4E, leading to repress translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.

Cellular Location
Cytoplasm. Nucleus. Note=Localization to the nucleus is unaffected by phosphorylation status. {ECO:0000250|UniProtKB:Q60876}

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Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Images

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - Background

EIF4EBP1 is a member of a family of translation repressor proteins. This 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 EIF4EBP1 with eIF4E inhibits complex assembly and represses translation. EIF4EBP1 is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation.

Phospho-EIF4EBP1(S111) Antibody Blocking peptide - References

Fonseca,B.D., J. Biol. Chem. 282 (34), 24514-24524 (2007)Armengol,G., Cancer Res. 67 (16), 7551-7555 (2007)