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EIF4E2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP1955c

Specification

EIF4E2 Blocking Peptide (Center) - Product Information

Primary Accession	O60573
Other Accession	Q8BMB3

EIF4E2 Blocking Peptide (Center) - Additional Information

Gene ID 9470

Other Names
Eukaryotic translation initiation factor 4E type 2, eIF-4E type 2, eIF4E type 2, Eukaryotic translation initiation factor 4E homologous protein, Eukaryotic translation initiation factor 4E-like 3, eIF4E-like protein 4E-LP, mRNA cap-binding protein 4EHP, mRNA cap-binding protein type 3, EIF4E2, EIF4EL3

Target/Specificity
The synthetic peptide sequence is selected from aa 120-134 of HUMAN EIF4E2

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.

EIF4E2 Blocking Peptide (Center) - Protein Information

Name EIF4E2 {ECO:0000303|PubMed:15153109, ECO:0000312|HGNC:HGNC:3293}

Function
Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation. Acts as a repressor of translation initiation (PubMed:17368478, PubMed:22751931, PubMed:25624349, PubMed:33581076, PubMed:9582349). In contrast to EIF4E, it is unable to bind eIF4G (EIF4G1, EIF4G2 or EIF4G3), suggesting that it acts by competing with EIF4E and block assembly of eIF4F at the cap (By similarity). In P-bodies, component of a complex that promotes miRNA-mediated translational repression (PubMed:28487484). Involved in virus-induced host response by mediating miRNA MIR34A-induced translational silencing which

controls IFNB1 production by a negative feedback mechanism (PubMed:28487484, PubMed:33581076).

Cellular Location
Cytoplasm. Cytoplasm, P-body

EIF4E2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

EIF4E2 Blocking Peptide (Center) - Images

EIF4E2 Blocking Peptide (Center) - Background

EIF4E2 is expressed exclusively in the cytoplasm. This protein 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.

EIF4E2 Blocking Peptide (Center) - References

Rom, E., et al., J. Biol. Chem. 273(21):13104-13109 (1998).
Mao, M., et al., Proc. Natl. Acad. Sci. U.S.A. 95(14):8175-8180 (1998).
Tee, A.R., et al., FEBS Lett. 564 (1-2), 58-62 (2004)