

EIF3L Blocking Peptide (N-term)

Synthetic peptide Catalog # BP19817a

Specification

EIF3L Blocking Peptide (N-term) - Product Information

Primary Accession Q9Y262

Other Accession <u>Q8AVIQ</u>, <u>Q8QZY1</u>, <u>Q5F428</u>, <u>Q3ZCK1</u>,

NP 057175.1

EIF3L Blocking Peptide (N-term) - Additional Information

Gene ID 51386

Other Names

Eukaryotic translation initiation factor 3 subunit L {ECO:0000255|HAMAP-Rule:MF_03011}, eIF3I {ECO:0000255|HAMAP-Rule:MF_03011}, Eukaryotic translation initiation factor 3 subunit 6-interacting protein {ECO:0000255|HAMAP-Rule:MF_03011}, Eukaryotic translation initiation factor 3 subunit E-interacting protein {ECO:0000255|HAMAP-Rule:MF_03011}, EIF3L {ECO:0000255|HAMAP-Rule:MF_03011}

Target/Specificity

The synthetic peptide sequence is selected from aa 27-40 of HUMAN EIF3L

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.

EIF3L Blocking Peptide (N-term) - Protein Information

Name EIF3L {ECO:0000255|HAMAP-Rule:MF 03011}

Function

Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:17581632, PubMed:25849773, PubMed:27462815). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl- tRNAi and eIF-5 to form the 43S pre-initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination



ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation (PubMed:17581632). The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem-loop binding to exert either translational activation or repression (PubMed:25849773).

Cellular Location

Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03011}.

EIF3L Blocking Peptide (N-term) - Protocols

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

Blocking Peptides

EIF3L Blocking Peptide (N-term) - Images

EIF3L Blocking Peptide (N-term) - Background

Component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis. The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S preinitiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of posttermination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation.

EIF3L Blocking Peptide (N-term) - References

Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 105(47):18139-18144(2008) Masutani, M., et al. EMBO J. 26(14):3373-3383(2007) Damoc, E., et al. Mol. Cell Proteomics 6(7):1135-1146(2007) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Colland, F., et al. Genome Res. 14(7):1324-1332(2004)