

EIF2S2 Blocking Peptide (C-term)

Synthetic peptide

Catalog # BP20272b

Specification

EIF2S2 Blocking Peptide (C-term) - Product Information

Primary Accession

[P20042](#)

Other Accession

[P41035](#), [Q99L45](#), [Q5E9D0](#), [NP_003899.2](#)**EIF2S2 Blocking Peptide (C-term) - Additional Information****Gene ID** 8894**Other Names**

Eukaryotic translation initiation factor 2 subunit 2, Eukaryotic translation initiation factor 2 subunit beta, eIF-2-beta, EIF2S2, EIF2B

Target/Specificity

The synthetic peptide sequence is selected from aa 285-299 of HUMAN EIF2S2

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.

EIF2S2 Blocking Peptide (C-term) - Protein Information**Name** EIF2S2**Synonyms** EIF2B**Function**

Component of the eIF2 complex that functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA (PubMed:31836389). This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form the 43S pre-initiation complex (43S PIC). Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF2 and release of an eIF2-GDP binary complex. In order for eIF2 to recycle and catalyze another round of initiation, the GDP bound to eIF2 must exchange with GTP by way of a reaction catalyzed by eIF2B (By similarity).

Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:P56329}

EIF2S2 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

EIF2S2 Blocking Peptide (C-term) - Images

EIF2S2 Blocking Peptide (C-term) - Background

Eukaryotic translation initiation factor 2 (EIF-2) functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA and binding to a 40S ribosomal subunit. EIF-2 is composed of three subunits, alpha, beta, and gamma, with the protein encoded by this gene representing the beta subunit. The beta subunit catalyzes the exchange of GDP for GTP, which recycles the EIF-2 complex for another round of initiation.

EIF2S2 Blocking Peptide (C-term) - References

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Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)
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Mikami, S., et al. Protein Expr. Purif. 46(2):348-357(2006)