

**EIF3B Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9291c****Specification**

---

**EIF3B Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P55884](#)**EIF3B Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 8662**Other Names**

Eukaryotic translation initiation factor 3 subunit B {ECO:0000255|HAMAP-Rule:MF\_03001}, eIF3b {ECO:0000255|HAMAP-Rule:MF\_03001}, Eukaryotic translation initiation factor 3 subunit 9 {ECO:0000255|HAMAP-Rule:MF\_03001}, Prt1 homolog, hPrt1, eIF-3-eta {ECO:0000255|HAMAP-Rule:MF\_03001}, eIF3 p110 {ECO:0000255|HAMAP-Rule:MF\_03001}, eIF3 p116, EIF3B {ECO:0000255|HAMAP-Rule:MF\_03001}

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP9291c](/products/AP9291c) was selected from the Center region of human EIF3B. 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.

**EIF3B Antibody (Center) Blocking Peptide - Protein Information****Name** EIF3B {ECO:0000255|HAMAP-Rule:MF\_03001}**Function**

RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed: [9388245](http://www.uniprot.org/citations/9388245), PubMed: [17581632](http://www.uniprot.org/citations/17581632), PubMed: [25849773](http://www.uniprot.org/citations/25849773), PubMed: [27462815](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/9388245" target="\_blank">9388245</a>, PubMed:<a href="http://www.uniprot.org/citations/17581632" target="\_blank">17581632</a>). 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:<a href="http://www.uniprot.org/citations/25849773" target="\_blank">25849773</a>).

#### **Cellular Location**

Cytoplasm {ECO:0000255|HAMAP-Rule:MF\_03001}. Cytoplasm, Stress granule. Note=Localizes to stress granules following cellular stress

#### **EIF3B Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **EIF3B Antibody (Center) Blocking Peptide - Images**

#### **EIF3B Antibody (Center) Blocking Peptide - Background**

eIF3B binds to the 40S ribosome and promotes the binding of methionyl-tRNA<sub>i</sub> and mRNA. The eIF3 complex is composed of at least 12 different subunits.

#### **EIF3B Antibody (Center) Blocking Peptide - References**

Elantak,L., et.al, J. Mol. Biol. 396 (4), 1097-1116 (2010)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)