

### EIF3B Antibody (aa1-50)

Rabbit Polyclonal Antibody Catalog # ALS15252

### **Specification**

### EIF3B Antibody (aa1-50) - Product Information

Application WB, IHC Primary Accession P55884

Reactivity Human, Mouse, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 92kDa KDa

# EIF3B Antibody (aa1-50) - 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

Human EIF3B

#### **Reconstitution & Storage**

Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

#### **Precautions**

EIF3B Antibody (aa1-50) is for research use only and not for use in diagnostic or therapeutic procedures.

# EIF3B Antibody (aa1-50) - 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:<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>, PubMed:<a href="http://www.uniprot.org/citations/25849773" target="\_blank">25849773</a>, PubMed:<a href="http://www.uniprot.org/citations/27462815" target="\_blank">27462815</a>). 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**

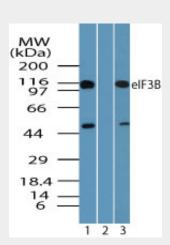
Cytoplasm {ECO:0000255|HAMAP-Rule:MF\_03001}. Cytoplasm, Stress granule. Note=Localizes to stress granules following cellular stress

# EIF3B Antibody (aa1-50) - Protocols

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

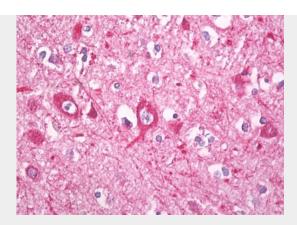
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### EIF3B Antibody (aa1-50) - Images



Western blot of eIF3B in A431 cell lysate in the 1) absence and 2) presence of immunizing...





Anti-EIF3B antibody IHC of human brain, cortex neurons.

# EIF3B Antibody (aa1-50) - 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 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.

# EIF3B Antibody (aa1-50) - References

Chaudhuri J., et al.J. Biol. Chem. 272:30975-30983(1997).

Methot N., et al.J. Biol. Chem. 272:1110-1116(1997).

Hillier L.W., et al. Nature 424:157-164(2003).

Scherer S.W., et al. Science 300:767-772(2003).

Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.