

# Anti-Eif3b Antibody

Catalog # ABO11337

#### Specification

## Anti-Eif3b Antibody - Product Information

ApplicationWBPrimary AccessionP55884HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Eukaryotic translation initiation factor 3 subunit B(EIF3B)detection. Tested with WB in Human; Mouse; Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-Eif3b Antibody - 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}

Calculated MW 92482 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse<br>

Subcellular Localization Cytoplasm .

Protein Name Eukaryotic translation initiation factor 3 subunit B

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human eIF3B(755-775aa EDFRKYRKMAQELYMEQKNER), different from the related rat and mouse sequences by one amino acid.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the eIF-3 subunit B family.

## Anti-Eif3b Antibody - 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/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>, PubMed:<a href="http://www.uniprot.org/citations/9388245" target="\_blank">9388245</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/17581632" target=" blank">17581632</a>, PubMed:<a href="http://www.uniprot.org/citations/9388245" target=" blank">9388245</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

#### Anti-Eif3b Antibody - Protocols

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

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



• <u>Cell Culture</u> Anti-Eif3b Antibody - Images



Anti-Eif3b antibody, ABO11337, Western blottingLane 1: HELA Cell LysateLane 2: 293T Cell LysateLane 3: A431 Cell Lysate

## Anti-Eif3b Antibody - Background

EIF3B(Eukaryotic Translation Initiation Factor 3, Subunit B), also called PRT1 or EIF3-p116, is a protein that in humans is encoded by the EIF3B gene. By searching an EST database, Methot et al.(1997) identified a cDNA encoding a human Prt1 homolog. Asano et al.(1997) demonstrated that the 115-kD component of HeLa cell eIF3 is actually composed of 2 proteins, p116(PRT1) and an unrelated 110-kD protein. Chaudhuri et al.(1997) isolated cDNAs encoding PRT1, which they called p110 based on the size of the corresponding component of rabbit eIF3.