

KD-Validated Anti-EIF3B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1829

Specification

KD-Validated Anti-EIF3B Rabbit Monoclonal Antibody - Product Information

Application WB
Primary Accession P55884

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 92 kDa, observed, 117 kDa KDa

Gene Name EIF3

Aliases EIF3B; Eukaryotic Translation Initiation Factor 3 Subunit B; EIF3S9; PRT1;

Eukaryotic Translation Initiation Factor 3,

Subunit 9 Eta, 116kDa; Eukaryotic

Translation Initiation Factor 3 Subunit 9;

Protein Synthesis 1; Prt1 Homolog; Eukaryotic Translation Initiation Factor 3,

Subunit 9 (Eta, 116kD); Eukaryotic

Translation Initiation Factor 3, Subunit B; EIF3-P110; EIF3-P116; EIF-3-Eta; EIF3 P110; EIF3 P116; EIF3-ETA; EIF3b; HPrt1

A synthesized peptide derived from human

elF3B

KD-Validated Anti-EIF3B Rabbit Monoclonal Antibody - Additional Information

Gene ID **8662**

Other Names

Immunogen

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}

KD-Validated Anti-EIF3B Rabbit Monoclonal 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:17581632, PubMed:25849773, PubMed:27462815, PubMed:9388245). 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, PubMed:9388245). 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(a>).

Cellular Location

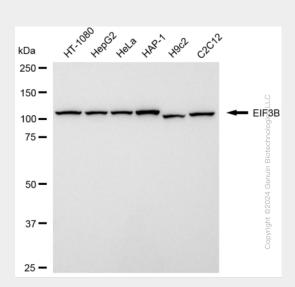
Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03001}. Cytoplasm, Stress granule. Note=Localizes to stress granules following cellular stress

KD-Validated Anti-EIF3B Rabbit Monoclonal Antibody - Protocols

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

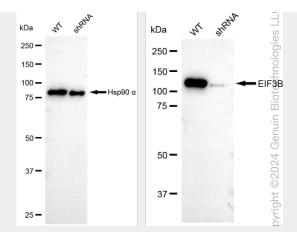
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-EIF3B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-EIF3B antibody (Cat#AGI1829). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-EIF3B antibody (Cat#AGI1829, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-EIF3B antibody (Cat#AGI1829). EIF3B expression in wild type (WT) and EIF3B shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-EIF3B antibody (Cat#AGI1829, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.