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EIF3H Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6638b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	O15372
Other Accession	Q5PPY6, Q5ZLE6, Q56JZ5
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Chicken, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39930
Antigen Region	234-263

Additional Information

Gene ID	8667
Other Names	Eukaryotic translation initiation factor 3 subunit H {ECO:0000255|HAMAP-Rule:MF_03007}, eIF3h {ECO:0000255|HAMAP-Rule:MF_03007}, Eukaryotic translation initiation factor 3 subunit 3 {ECO:0000255|HAMAP-Rule:MF_03007}, eIF-3-gamma, eIF3 p40 subunit {ECO:0000255|HAMAP-Rule:MF_03007}, EIF3H {ECO:0000255|HAMAP-Rule:MF_03007}
Target/Specificity	This EIF3H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 234-263 amino acids from the C-terminal region of human EIF3H.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EIF3H Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF3H {ECO:0000255|HAMAP-Rule:MF_03007}
Function	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). 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). 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).
Cellular Location	Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03007}.

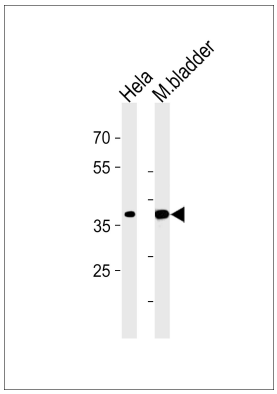
Background

EIF3H is a 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 preinitiation 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 posttermination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation.

References

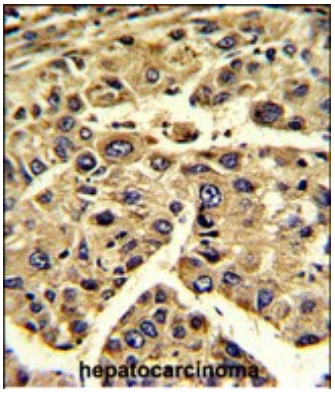
Cappuzzo,F., J Thorac Oncol 4 (4), 472-478 (2009)
Zhou,M., Proc. Natl. Acad. Sci. U.S.A. 105 (47), 18139-18144 (2008)

Images

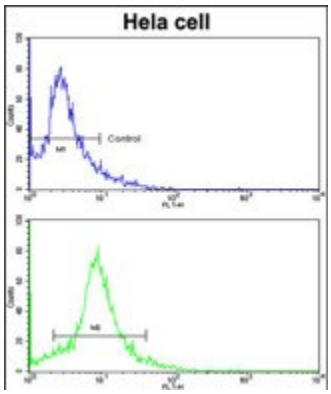


EIF3H Antibody (N-term) (Cat. #AP6638b) western blot analysis in Hela cell line and mouse bladder tissue lysates (35ug/lane).This demonstrates the EIF3H antibody detected the EIF3H protein (arrow).

Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with EIF3H Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been



evaluated.



Flow cytometric analysis of hela cells using EIF3H Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.