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# EIF6 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI14664

## **Product Information**

Application WB Primary Accession P56537

Other Accession NM 002212, NP 002203

**Reactivity** Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine, Sheep,

Yeast

**Predicted** Human, Mouse, Chicken, Dog, Guinea Pig, Sheep

Host Rabbit
Clonality Polyclonal
Calculated MW 26599

# **Additional Information**

**Gene ID** 3692

Alias Symbol 2, CAB, EIF3A, ITGB4BP, b, b(2)gcn, gcn, p27BBP, eIF-6, p27(BBP)

Other Names Eukaryotic translation initiation factor 6

{ECO:0000255 | HAMAP-Rule:MF\_03132}, eIF-6

{ECO:0000255 | HAMAP-Rule:MF\_03132}, B(2)GCN homolog, B4 integrin interactor, CAB, p27(BBP), EIF6 {ECO:0000255 | HAMAP-Rule:MF\_03132}

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 ul of distilled water. Final anti-EIF6 antibody concentration is 1 mg/ml

in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C.

Avoid repeat freeze-thaw cycles.

**Precautions** EIF6 antibody - N-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name EIF6 {ECO:0000255 | HAMAP-Rule:MF\_03132,

ECO:0000312 | HGNC:HGNC:6159}

**Function** Binds to the 60S ribosomal subunit and prevents its association with the 40S

ribosomal subunit to form the 80S initiation complex in the cytoplasm

(PubMed: 10085284, PubMed: 14654845, PubMed: 21536732,

PubMed:<u>32669547</u>). Behaves as a stimulatory translation initiation factor downstream insulin/growth factors. Is also involved in ribosome biogenesis. Associates with pre-60S subunits in the nucleus and is involved in its nuclear

export. Cytoplasmic release of TIF6 from 60S subunits and nuclear relocalization is promoted by a RACK1 (RACK1)- dependent protein kinase C activity (PubMed:10085284, PubMed:14654845, PubMed:21536732). In tissues responsive to insulin, controls fatty acid synthesis and glycolysis by exerting translational control of adipogenic transcription factors such as CEBPB, CEBPD and ATF4 that have G/C rich or uORF in their 5'UTR. Required for ROS-dependent megakaryocyte maturation and platelets formation, controls the expression of mitochondrial respiratory chain genes involved in reactive oxygen species (ROS) synthesis (By similarity). Involved in miRNA-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC (PubMed:17507929). Modulates cell cycle progression and global translation of pre-B cells, its activation seems to be rate-limiting in tumorigenesis and tumor growth (By similarity).

**Cellular Location** 

Cytoplasm. Nucleus, nucleolus. Note=Shuttles between cytoplasm and nucleus/nucleolus

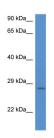
**Tissue Location** 

Expressed at very high levels in colon carcinoma with lower levels in normal colon and ileum and lowest levels in kidney and muscle (at protein level).

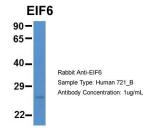
### References

Si K.,et al.Proc. Natl. Acad. Sci. U.S.A. 94:14285-14290(1997). Biffo S.,et al.J. Biol. Chem. 272:30314-30321(1997). Donadini A.,et al.Gene 266:35-43(2001). Mao M.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:8175-8180(1998). Ota T.,et al.Nat. Genet. 36:40-45(2004).

# **Images**



WB Suggested Anti-EIF6 Antibody Titration: 1.0  $\mu$ g/ml Positive Control: Hela Whole CellEIF6 is supported by BioGPS gene expression data to be expressed in HeLa



Host:Rabbit
Target Name:EIF6
Sample Tissue:Human 721\_B
Antibody Dilution: 1.0µg/mlEIF6 is supported by BioGPS gene expression data to be expressed in 721\_B

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.