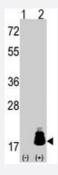


EIF4EBP1 polyclonal antibody

Catalog # PAB3954 Size 400 uL

Applications



Western Blot (Transfected lysate)

Western blot analysis of EIF4EBP1 (arrow) using rabbit EIF4EBP1 polyclonal antibody (Cat # PAB3954). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EIF4EBP1 gene (Lane 2) (Origene Technologies).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with EIF4EBP1 polyclonal antibody (Cat # PAB3954), 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.

| Specification | |
|---------------------|---|
| Product Description | Rabbit polyclonal antibody raised against synthetic peptide of EIF4EBP1. |
| Immunogen | A synthetic peptide (conjugated with KLH) corresponding to residues surrounding T69 of human EIF 4EBP1. |
| Host | Rabbit |
| Reactivity | Human |
| Form | Liquid |
| Purification | Protein A purification |
| Reactivity | Human Liquid |



Product Information

| Recommend Usage | Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:10-50) Western Blot (1:1000) The optimal working dilution should be determined by the end user. |
|---------------------|---|
| Storage Buffer | In PBS (0.09% sodium azide) |
| Storage Instruction | Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing. |
| Note | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

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| Gene Info — EIF4EBP1 | |
|----------------------|---|
| Entrez GenelD | <u>1978</u> |
| Protein Accession# | NP_004086 |
| Gene Name | EIF4EBP1 |
| Gene Alias | 4E-BP1, 4EBP1, BP-1, MGC4316, PHAS-I |
| Gene Description | eukaryotic translation initiation factor 4E binding protein 1 |
| Omim ID | 602223 |
| Gene Ontology | <u>Hyperlink</u> |
| Gene Summary | This gene encodes one member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosp horylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. [provided by RefSeq |



Other Designations

elF4E-binding protein 1|phosphorylated heat- and acid-stable protein regulated by insulin 1

Publication Reference

4E-binding protein 1: a key molecular "funnel factor" in human cancer with clinical implications.

Armengol G, Rojo F, Castellvi J, Iglesias C, Cuatrecasas M, Pons B, Baselga J, Ramon y Cajal S. Cancer Research 2007 Aug; 67(16):7551.

 PRAS40 is a target for mammalian target of rapamycin complex 1 and is required for signaling downstream of this complex.

Fonseca BD, Smith EM, Lee VH, MacKintosh C, Proud CG.

The Journal of Biological Chemistry 2007 Jun; 282(34):24514.

Pathway

- Acute myeloid leukemia
- ErbB signaling pathway
- Insulin signaling pathway
- mTOR signaling pathway

Disease

- Alzheimer disease
- Genetic Predisposition to Disease
- Multiple System Atrophy
- Obesity