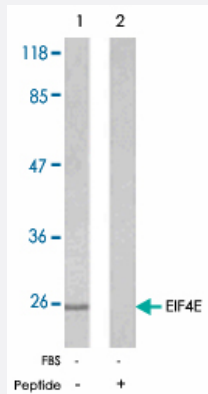


# EIF4E polyclonal antibody

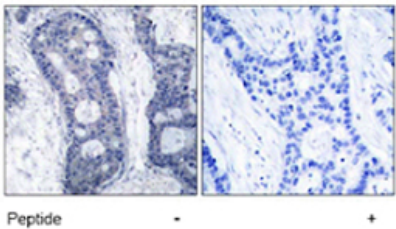
Catalog # PAB5342      Size 100 ug

## Applications



### Western Blot (Cell lysate)

Western blot analysis of extract from NIH/3T3 cells untreated or treated with 10% serum (15 min) , using EIF4E polyclonal antibody (Cat # PAB5342) .



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using EIF4E polyclonal antibody (Cat # PAB5342) .

## Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of EIF4E.
Immunogen	A synthetic peptide corresponding to residues surrounding S209 of human EIF4E.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

<b>Recommend Usage</b>	Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
<b>Storage Instruction</b>	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot (Cell lysate)

Western blot analysis of extract from NIH/3T3 cells untreated or treated with 10% serum (15 min) , using EIF4E polyclonal antibody (Cat # PAB5342) .

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using EIF4E polyclonal antibody (Cat # PAB5342) .

## Gene Info — EIF4E

<b>Entrez GeneID</b>	<a href="#">1977</a>
<b>Gene Name</b>	EIF4E
<b>Gene Alias</b>	CBP, EIF4E1, EIF4EL1, EIF4F, MGC111573
<b>Gene Description</b>	eukaryotic translation initiation factor 4E
<b>Omim ID</b>	<a href="#">133440</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## Gene Summary

All eukaryotic cellular mRNAs are blocked at their 5-prime ends with the 7-methylguanosine cap structure, m<sup>7</sup>GpppX (where X is any nucleotide). This structure is involved in several cellular processes including enhanced translational efficiency, splicing, mRNA stability, and RNA nuclear export. EIF4E is a eukaryotic translation initiation factor involved in directing ribosomes to the cap structure of mRNAs. It is a 24-kD polypeptide that exists as both a free form and as part of a multiprotein complex termed EIF4F. The EIF4E polypeptide is the rate-limiting component of the eukaryotic translation apparatus and is involved in the mRNA-ribosome binding step of eukaryotic protein synthesis. The other subunits of EIF4F are a 50-kD polypeptide, termed EIF4A (see MIM 601102), that possesses ATPase and RNA helicase activities, and a 220-kD polypeptide, EIF4G (MIM 600495) (Rychlik et al., 1987 [PubMed 3469651]).[supplied by OMIM]

## Other Designations

eIF-4F 25 kDa subunit|eukaryotic translation initiation factor 4E-like 1|mRNA cap-binding protein

## Publication Reference

- [tRNASer\(CGA\) differentially regulates expression of wild-type and codon-modified papillomavirus L1 genes.](#)

Gu W, Li M, Zhao WM, Fang NX, Bu S, Frazer IH, Zhao KN.

Nucleic Acids Research 2004 Aug; 32(15):4448.

- [Tethered-function analysis reveals that eIF4E can recruit ribosomes independent of its binding to the cap structure.](#)

De Gregorio E, Baron J, Preiss T, Hentze MW.

RNA 2001 Jan; 7(1):106.

Application: WB-Tr, Human, HeLa cells

- [The C-terminal domain of eukaryotic protein synthesis initiation factor \(eIF\) 4G is sufficient to support cap-independent translation in the absence of eIF4E.](#)

Ohlmann T, Rau M, Pain VM, Morley SJ.

The EMBO Journal 1996 Mar; 15(6):1371.

Application: WB-Ce, Rabbit, Rabbit reticulocytes

## Pathway

- [Insulin signaling pathway](#)
- [mTOR signaling pathway](#)

## Disease

- [Tobacco Use Disorder](#)