

Product datasheet for **AP20834PU-M**

EIF4EBP1 pThr37 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of 4E-BP1 protein only when phosphorylated at Thr37.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 15 to 20 kDa
Gene Name:	eukaryotic translation initiation factor 4E binding protein 1
Database Link:	<u>Entrez Gene 13685 Mouse</u> <u>Entrez Gene 116636 Rat</u> <u>Entrez Gene 1978 Human</u> <u>Q13541</u>



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Background:

The translation of proteins from eukaryotic mRNA is initiated by the multisubunit complex eIF-4F, which associates with the mRNA 5' cap structure. eIF-4E, a component of eIF-4F, is responsible for binding to the 5' cap structure and for the assembly of the eIF-4F complex. The regulatory protein 4E-BP1, also referred to as PHAS-I, inhibits eIF-4E function. Phosphorylation of 4E-BP1 by S6 kinase p70, MAP kinases or PKCs causes the disassociation of 4E-BP1 from eIF-4E, promoting translation. A protein that is functionally related to 4E-BP1, designated 4E-BP2, also associates with eIF-4E.

Synonyms:

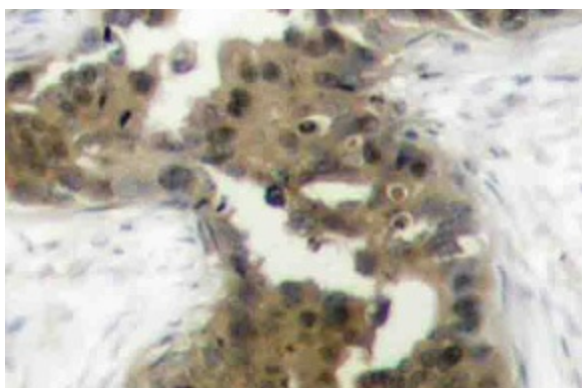
PHAS-I, PHAS-1, PHAS1

Protein Pathways:

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

Product images:


Western blot (WB) analyzes of p-4E-BP1 (pThr37) antibody (Cat.-No.: [AP20834PU-N]) in extracts from MDA-MB-435 EGF cells.



Immunohistochemistry (IHC) analyzes of p-4E-BP1 (pThr37) antibody (Cat.-No.: [AP20834PU-N]) in paraffin-embedded human breast carcinoma tissue.