

Product datasheet for **AP20713PU-N**

EIF4EBP1 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 |
| Immunogen: | Synthetic peptide, corresponding to the N-terminal of Human 4E-BP1. |
| Specificity: | This antibody detects endogenous levels of 4E-BP1 protein. (region surrounding Pro30) |
| Formulation: | Phosphate buffered saline (PBS), pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% by SDS-PAGE) Preservative: 0.05% sodium azide |
| Concentration: | 1.0 mg/ml |
| Purification: | Affinity-chromatography using epitope-specific immunogen |
| Conjugation: | Unconjugated |
| Storage: | Store 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 Q13541</u> |



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Background:

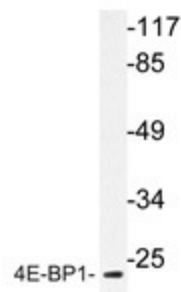
The translation of proteins from eukaryotic mRNA is initiated by the multisubunit complex eIF-4F, which associates with the mRNA 5' cap structure. eIF-4E, a component of eIF-4F, is responsible for binding to the 5' cap structure and for the assembly of the eIF-4F complex. The regulatory protein 4E-BP1, 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:

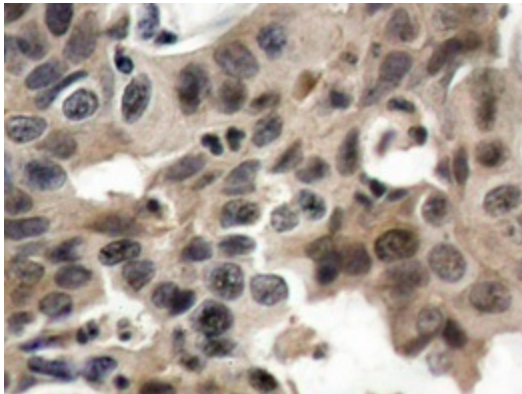
PHAS-I, PHAS-1, PHAS1

Protein Pathways:

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

Product images:

Western blot analyzes of 4E-BP1 antibody in extracts from MDA-MB-435 cells.



Immunohistochemistry analyzes of 4E-BP1 antibody in paraffin-embedded human breast carcinoma tissue.