

## 4E-BP1(Ab-46) Antibody

Catalog No: #21216

Package Size: #21216-1 50ul #21216-2 100ul

Orders: order@signalwayantibody.com

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## Description

|                       |   |
|-----------------------|---|
| Product Name          | 4E-BP1(Ab-46) Antibody  |
| Host Species          | Rabbit  |
| Clonality             | Polyclonal  |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide. |
| Applications          | WB IHC IF   |
| Species Reactivity    | Hu Ms Rt  |
| Specificity           | The antibody detects endogenous level of total 4E-BP1 protein.  |
| Immunogen Type        | Peptide-KLH   |
| Immunogen Description | Peptide sequence around aa.44~48 (S-T-T-P-G) derived from Human 4E-BP1.   |
| Target Name           | 4E-BP1  |
| Other Names           | EIF4EBP1; PHAS-1;   |
| Accession No.         | Swiss-Prot: Q13541NCBI Protein: NP_004086.1   |
| Uniprot               | Q13541  |
| GeneID                | 1978;   |
| Concentration         | 1.0mg/ml  |
| Formulation           | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                  |
| Storage               | Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.   |

## Application Details

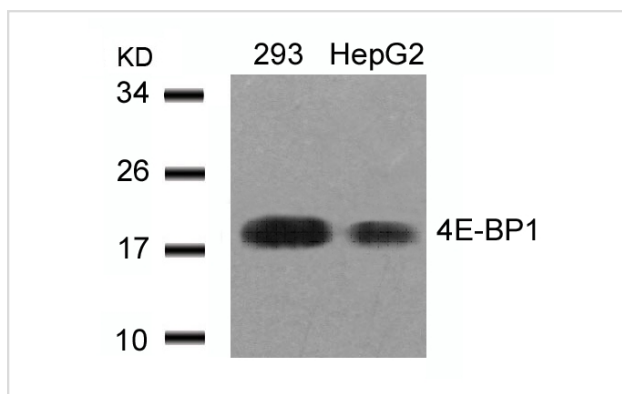
Predicted MW: 18kd

Western blotting: 1:500~1:1000

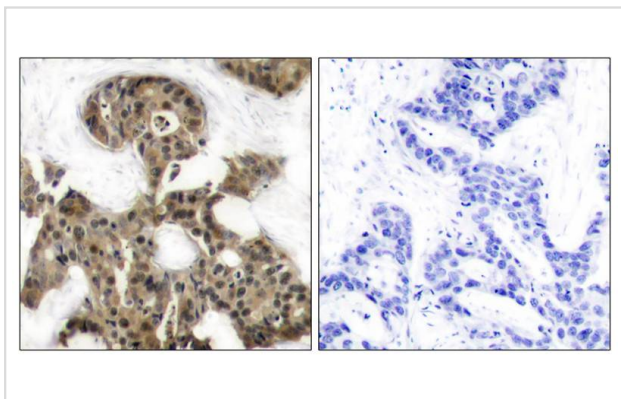
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

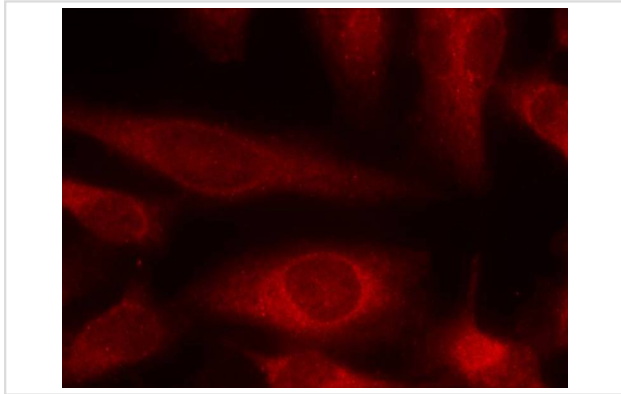
## Images



Western blot analysis of extracts from 293 and HepG2 cells using 4E-BP1 (Ab-46) Antibody #21216.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using 4E-BP1 (Ab-46) Antibody #21216 (left) or the same antibody preincubated with blocking peptide (right).



Immunofluorescence staining of methanol-fixed HeLa cells using 4E-BP1 (Ab-46) Antibody #21216.

## Background

4E-BP1 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 phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation.

Gingras AC, et al. (1998) *Genes Dev* 12(4): 502-513.

Brugarolas J, et al. (2004) *Genes Dev* 18(23): 2893-2904.

Kumar V, et al. (2000) *EMBO J* 19(5): 1087-1097.

Moody CA, et al. (2005) *J Virol* 79(9): 5499-5506.

Burnett PE, et al. (1998) *Proc Natl Acad Sci U S A* 95(4): 1432-1437.

Note: This product is for in vitro research use only