4E-BP1(Phospho-Thr46) Antibody

Catalog No: #11223

Package Size: #11223-1 50ul #11223-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	4E-BP1(Phospho-Thr46) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of 4E-BP1 only when phosphorylated at Threonine 45.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 46 (S-T-T(p)-P-G) derived from Human 4E-BP1.
Target Name	4E-BP1
Modification	Phospho
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 Mg2+ and Ca2+), 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.

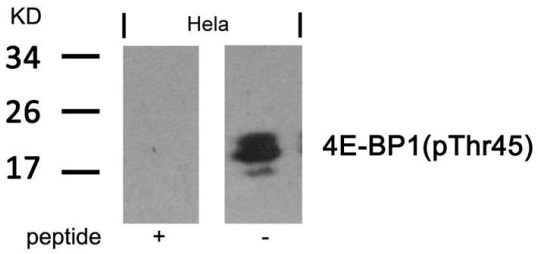
Application Details

Predicted MW: 18kd

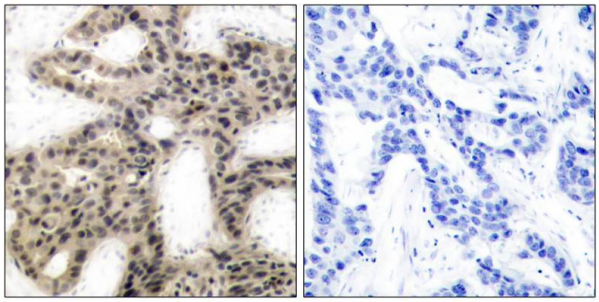
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from Hela cells using 4E-BP1 (Phospho-Thr46) Antibody #11223 and the same antibody preincubated with blocking peptide.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using 4E-BP1(Phospho-Thr45) Antibody #11223(left) or the same antibody preincubated with blocking peptide(right).

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