

## 4E-BP1 (Phospho-Thr70) Antibody

Catalog No: #11781

Package Size: #11781-1 50ul #11781-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

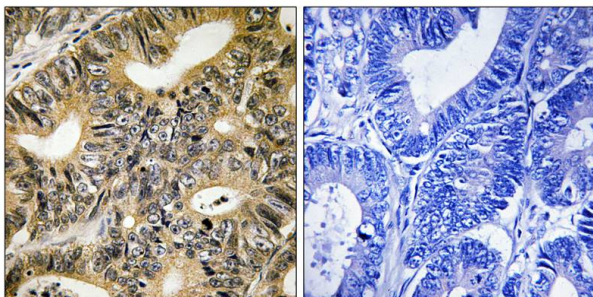
## Description

Product Name	4E-BP1 (Phospho-Thr70) 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 chromatography using non-phosphopeptide.
Applications	IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of 4E-BP1 only when phosphorylated at threonine 70.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine70 (T-K-T(p)-P-P) derived from Human 4E-BP1.
Target Name	4E-BP1
Modification	Phospho
Other Names	4EBP1; P/OKCL.6; P/OKCL.6; PHAS-I;
Accession No.	Swiss-Prot#: Q13541; NCBI Gene#: 1978; NCBI Protein#: NP_004086.1.
SDS-PAGE MW	12kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG 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/1 year

## Application Details

Immunohistochemistry: 1:50~1:100

## Images



Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using 4E-BP1 (Phospho-Thr70) antibody #11781 (left) or the same antibody preincubated with blocking peptide (right).

## Background

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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.

Pause A., *Nature* 371:762-767(1994).

Gevaert K., *Nat. Biotechnol.* 21:566-569(2003).

Haghighat A., *EMBO J.* 14:5701-5709(1995).

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.