4E-BP1 (Phospho Thr46) Rabbit pAb

CatalogNo: YP0002 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 13kD (Calculated)

18kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
ELISA 1:20000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human 4E-BP1 around the phosphorylation site of Thr45. AA range:13-62

Specificity Phospho-4E-BP1 (T46) Polyclonal Antibody detects endogenous levels of 4E-BP1 protein only when phosphorylated at T46.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):STtPG

Target Information

Gene name EIF4EBP1

Protein Name Eukaryotic translation initiation factor 4E-binding protein 1

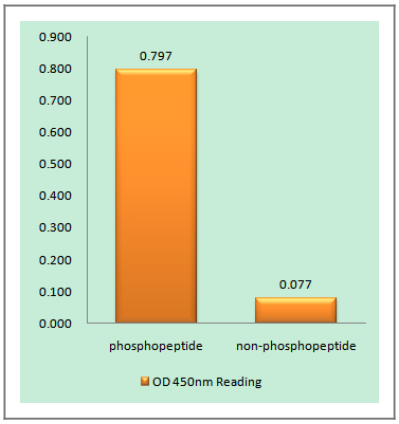
Organism	Gene ID	UniProt ID
Human	1978;	Q13541;
Mouse	13685;	Q60876;
Rat	116636;	Q62622;

Cellular Localization Nucleus

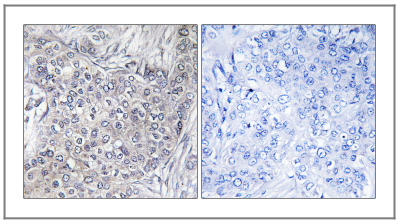
Tissue specificity Colon ,Epithelium ,Lung ,Placenta ,Platelet ,

Function Function:Regulates eIF4E activity by preventing its assembly into the eIF4F complex. Mediates the regulation of protein translation by hormones , growth factors and other stimuli that signal through the MAP kinase pathway. ,PTM:Phosphorylated on serine and threonine residues in response to insulin , EGF and PDGF. Phosphorylated upon DNA damage , probably by ATM or ATR. ,similarity:Belongs to the eIF4E-binding protein family. ,subunit:Nonphosphorylated EIF4EBP1 competes with EIF4G1/EIF4G3 to interact with EIF4E; insulin stimulated MAP-kinase (MAPK1 and MAPK3) phosphorylation of EIF4EBP1 causes dissociation of the complex allowing EIF4G1/EIF4G3 to bind and consequent initiation of translation. Rapamycin can attenuate insulin stimulation , mediated by FKBPs. ,

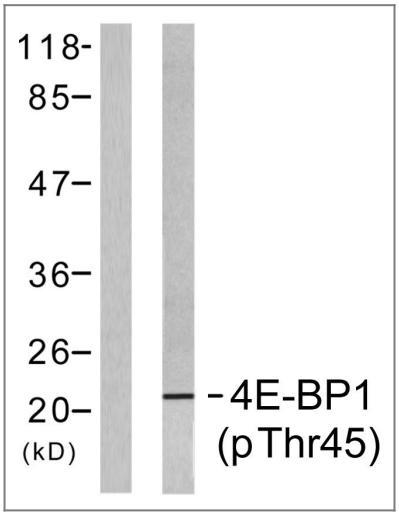
Validation Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using 4E-BP1 (Phospho-Thr45) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using 4E-BP1 (Phospho-Thr45) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from MDA-MB-435 cells treated with EGF 200ng/ml 5', using 4E-BP1 (Phospho-Thr45) Antibody. The lane on the right is blocked with the phospho peptide.

Contact information

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
4E-BP1 (Phospho Thr46) Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.