4E-BP1 (Phospho Thr37/46) (PT0862R) PT™ Rabbit mAb

CatalogNo: YM8631 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ICC/IF,ELISA

MW
- 13kD (Calculated)

15-20kD (Observed)

Isotype
- IgG, Kappa

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

WB 1:2000-1:10000
ICC/IF 1:200-1:1000
ELISA 1:5000-1:20000

Basic Information

Clonality	Monoclonal
Clone Number	PT0862R

Immunogen Information

Immunogen	The specific immunogen used to produce this antibody is proprietary information.

Specificity 4E-BP1 (Phospho Thr37/46) Antibody detects endogenous levels of 4E-BP1 protein only when phosphorylated at 4E-BP1 (Phospho T37/46).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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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):TTpGG

Target Information

Gene name EIF4EBP1

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

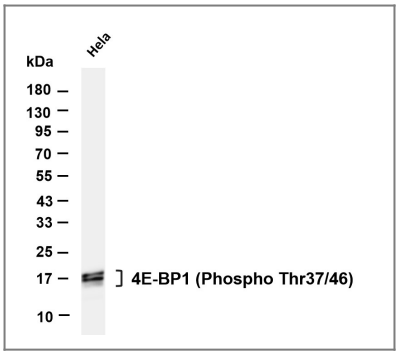
Organism	Gene ID	UniProt ID
Human	1978;	Q13541;
Mouse	13685;	Q60876;
Rat	116636;	Q62622;

Cellular Localization Nucleus

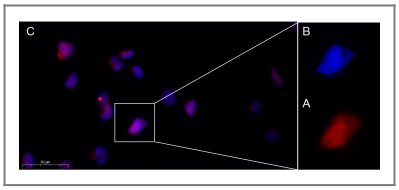
Tissue specificity Colon ,Epithelium ,Lung ,Placenta ,Platelet ,

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. ,

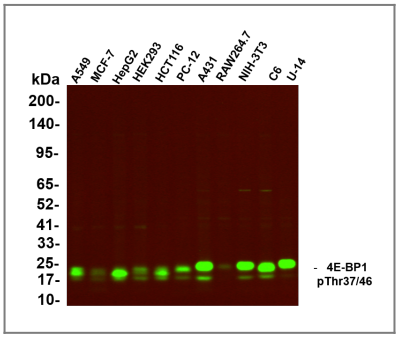
Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-4E-BP1 (Phospho Thr37/46) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela serum was starved overnight and treated with insulin (100nM) for 5 minutes Predicted band size: 13kDa Observed band size: 15-20kDa



Immunofluorescence analysis of HeLa . Picture A: 4E-BP1 (Phospho 4E-BP1 (Phospho Thr37/46)) (PT0862R) Rabbit mAb (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution . The Dilight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: Mouse brain Lane2: Hela Lane3: A549 Lane4: MCF-7 Lane5: HepG2 Lane6: HEK293 Lane7: HCT116 Lane8: PC-12 Lane9: A431 Lane10: RAW264.7 Lane11: NIH-3T3 Lane12: C6 Lane13: U-14 Lane14: 293F

Contact information

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Please scan the QR code to access additional product information:
4E-BP1 (Phospho Thr37/46) (PT0862R) PT™ Rabbit mAb

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