4E-BP1 (Phospho-Thr70) polyclonal antibody

Catalog: BCP00125

Host: Rabbit

Reactivity: Human

BackGround:

Translation repressor protein 4E-BP1 (also known as PHAS-1) inhibits cap-dependent translation by binding to the translation initiation factor eIF4E. Hyperphosphorylation of 4E-BP1 disrupts this interaction and results in activation of cap-dependent translation. Both the PI3 kinase/Akt pathway and FRAP/mTOR kinase regulate 4E-BP1 activity. Multiple 4E-BP1 residues are phosphorylated in vivo. While phosphorylation by FRAP/mTOR at Thr37 and Thr46 does not prevent the binding of 4E-BP1 to eIF4E, it is thought to prime 4E-BP1 for subsequent phosphorylation at Ser65 and Thr70.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Molecular Weight:

~ 18 kDa

Swiss-Prot:

Q13541

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000~1:2000

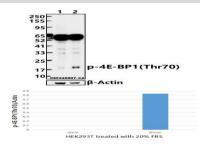
Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Specificity:

4E-BP1(Phospho-Thr70) polyclonal antibody detects endogenous levels of 4E-BP1 protein only when phosphorylated at Thr70.

DATA:



Western blot (WB) analysis of 4E-BP1(Phospho-Thr70) polyclonal an-

tibody at 1:1000 dilution

Lane1:HEK293T whole cell lysate(40ug)

Lane2:HEK293T treated with 20% FBS for 30min whole cell ly-

sate(40ug)

For research use only, not for use in diagnostic procedure.