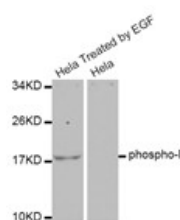


<b>Product name:</b>	Phospho-EIF4EBP1 (T37/46)
<b>Cat number:</b>	MAB-94214
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	236B4
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rb
<b>Isotype:</b>	IgG
<b>Reactivity:</b>	Hu, Ms, Rt
<b>Applications:</b>	WB 1:1000
<b>Molecular Weight:</b>	15-20 kDa
<b>Purification:</b>	: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Thr37 and Thr46 of mouse 4E-BP1 protein.
<b>Form:</b>	liquid
<b>Buffer:</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
<b>Storage:</b>	Store at -20°C. Avoid freeze / thaw cycles.
<b>Background:</b>	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 (1). Both the PI3 kinase/Akt pathway and FRAP/mTOR kinase regulate 4E-BP1 activity (2,3). Multiple 4E-BP1 residues are phosphorylated in vivo (4). 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 (5). Phospho-4E-BP1 (Thr37/46) (236B4) Rabbit mAb detects endogenous levels of 4E-BP1 only when phosphorylated at Thr37 and/or Thr46. This antibody may cross-react with 4E-BP2 and 4E-BP3 when phosphorylated at equivalent sites. Non-specific staining has been observed in mitotic cells by immunofluorescence.



Western blot analysis on HeLa cells using Phospho-4E-BP1 (Thr37/46) (236B4) monoclonal antibody