Product Data Sheet:
Phospho-EIF4EBP1 (S65)

Cat. No:	MAB-94213
Conjugate:	Unconjugated
Size:	100 ug
Clone:	174A9
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	WB 1:1000
Molecular Weight:	15 kDa
Purification:	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser65 of mouse 4E-BP1 protein.
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 (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 (Ser65) (174A9) Rabbit mAb recognizes endogenous levels of 4EBP1 protein only when phosphorylated at Ser65.
Form:	liquid
Buffer:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage:	Store at –20°C. Avoid freeze / thaw cycles.

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