

EIF4EBP1 antibody

Catalog No: #38227

Package Size: #38227-1 50ul #38227-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

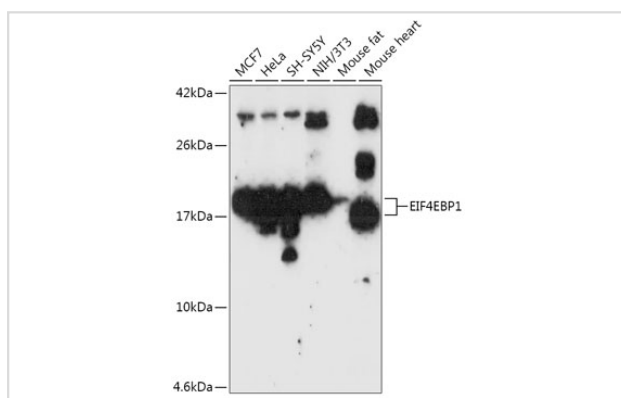
Description

| | |
|-----------------------|--|
| Product Name | EIF4EBP1 antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were purified by affinity purification using immunogen. |
| Applications | WB,IHC,IF |
| Species Reactivity | Human,Mouse,Rat |
| Specificity | The antibody detects endogenous level of total EIF4EBP1 protein. |
| Immunogen Type | Recombinant Protein |
| Immunogen Description | Recombinant protein of human EIF4EBP1. |
| Target Name | EIF4EBP1 |
| Other Names | EIF4EBP1;4E-BP1;4EBP1;BP-1;MGC4316;PHAS-I; |
| Accession No. | Swiss-Prot#: Q13541NCBI Gene ID: 1978 |
| SDS-PAGE MW | 12kd |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

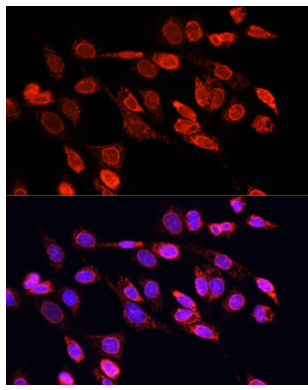
Application Details

WB □ 1:500 - 1:1000 IHC □ 1:50 - 1:200 IF □ 1:100 - 1:200

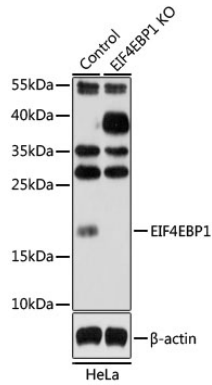
Images



Western blot analysis of extracts of various cell lines, using EIF4EBP1 antibody at 1:1000 dilution.



Immunofluorescence analysis of NIH/3T3 cells using EIF4EBP1 antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



Western blot analysis of extracts from normal (control) and EIF4EBP1 knockout (KO) HeLa cells, using EIF4EBP1 antibody at 1:500 dilution.

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).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.