# Recombinant EIF4EBP1 protein



## Catalog No: 81391, 81691 Expressed In: *E. coli*

### Quantity: 50, 1000 µg Concentration: 1 µg/µl Source: Human

**Buffer Contents:** Recombinant EIF4EBP1 protein is supplied in 25 mM Tris pH 7.4, 300 mM NaCl, 10% glycerol, 0.5 mM TCEP.

**Background:** EIF4EBP1 (Eukaryotic translation initiation factor 4E-binding protein 1, also known as 4E-BP1 or eIF4Ebinding protein 1) is a repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form competes with EIF4G1/EIF4G3 and strongly binds to EIF4E, leading to repress translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.

**Protein Details:** Recombinant EIF4EBP1 protein was expressed in *E.coli* as the full length protein (accession number NP\_004086.1) with an N-terminal 6×His tag. The molecular weight of the protein is 14.51 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data this product is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

#### EIF4EBP1



#### Recombinant EIF4EBP1 protein

12.5% SDS-PAGE Coomassie staining M.W.: 14.51 kDa Purity: ≥ 90%