Catalog #: PEH0565



## Summary

Name	EIF4EBP1
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/µg as determined by LAL test.
Construction	Recombinant Human Eukaryotic Translation Initiation Factor 4E-Binding Protein 1 is produced by our E.coli expression system and the target gene encoding Met1-Ile118 is expressed with a 6His tag at the N-terminus.
Accession #	Q13541
Host	E.coli
Species	Human
Predicted Molecular Mass	14.74 KDa
Formulation	Lyophilized from a 0.2 $\mu m$ filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SDS-PAGE** image

kDa	MK	R
120 90	-	
60		
40	-	
30		
22		
14	-	



## Background

Alternative Names	Eukaryotic Translation Initiation Factor 4E-Binding Protein 1; 4E-BP1; eIF4E-Binding Protein 1; Phosphorylated Heat- and Acid-Stable Protein Regulated by Insulin 1; PHAS-I; EIF4EBP1
Background	Eukaryotic Translation Initiation Factor 4E-Binding Protein 1 (4EBP1) is a number of the eIF4E-binding protein family. 4EBP1 regulates eIF4E activity by preventing its assembly into the eIF4F complex. 4EBP1 mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways. Non-phosphorylated 4EBP1 competes with EIF4G1/EIF4G3 to interact with EIF4E. 4EBP1 is phosphorylated in response to various signals including insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. 4EBP1 has a role in progression of breast neoplasms through cell signaling.

## Note

For Research Use Only, Not for Diagnostic Use.