

# Recombinant human Eukaryotic translation initiation factor 4E-binding protein 2



Catalog No: #AP72540

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Package Size: #AP72540-1 20ug #AP72540-2 100ug #AP72540-3 1mg

## Description

Product Name	Recombinant human Eukaryotic translation initiation factor 4E-binding protein 2
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-120aaSequence Info:Full Length
Accession No.	Q13542
Uniprot	Q13542
GeneID	1979;
Calculated MW	14.9 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MSSSAGSGHQPSQSRAIPTRTVAISDAAQLPHDYCTTPGGTLFSTTPGGTRIIYDRKFLDRRNSPMAQTPPC HLPNIPGVTSPTGLIEDSKVEVNNLNNLNNHDKHAVGDDAQFEMDI
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.  Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

## Background

Repressor of translation initiation involved in synaptic plasticity, learning and memory formation . Regulates EIF4E activity by preventing its assembly into the eIF4F complex: hypophosphorylated form of EIF4EBP2 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 . EIF4EBP2 is enriched in brain and acts as a regulator of synapse activity and neuronal stem cell renewal via its ability to repress translation initiation . Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways .

## References

Insulin-dependent stimulation of protein synthesis by phosphorylation of a regulator of 5'-cap function.Pause A., Belsham G.J., Gingras A.-C., Donze O., Lin T.-A., Lawrence J.C. Jr., Sonenberg N.Nature 371:762-767(1994)Research Topic:Transcription

Note: This product is for in vitro research use only