

Datasheet for ABIN7563529

## eIF4EBP2 Protein (AA 1-120) (His tag)



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### Overview

Quantity:	1 mg
Target:	eIF4EBP2 (EIF4EBP2)
Protein Characteristics:	AA 1-120
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This eIF4EBP2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Purpose:	Custom-made recombinat Eif4ebp2 Protein expressed in mammalien cells.
Sequence:	<p>MSASAGGSHQ PSQSRAIPTR TVAISDAAQL PQDYCTTPGG TLFSTTPGGT RIIYDRKFLL</p> <p>DRRNSPMAQT PPCHLPNIPG VTSPGALIED SKVEVNNLNN LNNHDRKHAV GDEAQFEMDI</p> <p><b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"> <li>• Made to order protein - from design to production - by highly experienced protein experts.</li> <li>• Protein expressed in mammalien cells and purified in one-step affinity chromatography</li> <li>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>

## Product Details

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris Page, Western Blot

Grade: custom-made

## Target Details

Target: eIF4EBP2 (EIF4EBP2)

Alternative Name: Eif4ebp2 ([EIF4EBP2 Products](#))

Background: Eukaryotic translation initiation factor 4E-binding protein 2 (4E-BP2) (eIF4E-binding protein 2) (Phosphorylated heat- and acid-stable protein regulated by insulin 2) (PHAS-II),FUNCTION: Repressor of translation initiation involved in synaptic plasticity, learning and memory formation (PubMed:16237163, PubMed:17029989). 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 (PubMed:17029989, PubMed:20347422, PubMed:23172145). 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 (PubMed:20347422, PubMed:24139800, PubMed:23172145). Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways (PubMed:8939971). {ECO:0000250|UniProtKB:Q13542, ECO:0000269|PubMed:16237163, ECO:0000269|PubMed:17029989, ECO:0000269|PubMed:20347422, ECO:0000269|PubMed:23172145, ECO:0000269|PubMed:24139800, ECO:0000269|PubMed:8939971}.

Molecular Weight: 12.9 kDa

UniProt: [P70445](#)

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months