

# Datasheet for ABIN7551775 elF4EBP2 Protein (AA 1-120) (His tag)



### Overview

Quantity:	1 mg
Target:	elF4EBP2 (ElF4EBP2)
Protein Characteristics:	AA 1-120
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This eIF4EBP2 protein is labelled with His tag.

#### Product Details

Product Details	
Purpose:	Custom-made recombinant EIF4EBP2 Protein expressed in mammalian cells.
Sequence:	MSSSAGSGHQ PSQSRAIPTR TVAISDAAQL PHDYCTTPGG TLFSTTPGGT RIIYDRKFLL
	DRRNSPMAQT PPCHLPNIPG VTSPGTLIED SKVEVNNLNN LNNHDRKHAV GDDAQFEMDI
	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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	<ul> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> </ul>
	The optimized expression system ensures reliability for intracellular, secreted and
	transmembrane proteins.

• State-of-the-art algorithm used for plasmid design (Gene synthesis).

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

## Target Details

Target:	elF4EBP2 (EIF4EBP2)
Alternative Name:	EIF4EBP2 (EIF4EBP2 Products)
Background:	Eukaryotic translation initiation factor 4E-binding protein 2 (4E-BP2) (eIF4E-binding protein
	2),FUNCTION: Repressor of translation initiation involved in synaptic plasticity, learning and
	memory formation (PubMed:30765518). 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:30765518, PubMed:25533957). 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 (By similarity). Mediates the regulation of protein translation by
	hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1
	pathways (By similarity). {ECO:0000250 UniProtKB:P70445, ECO:0000269 PubMed:25533957,
	ECO:0000269 PubMed:30765518}.
Molecular Weight:	12.9 kDa
UniProt:	Q13542

## **Application Details**

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
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