

Product datasheet for **TP500578**

Eif4ebp2 (NM_010124) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse eukaryotic translation initiation factor 4E binding protein 2 (Eif4ebp2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR200578 protein sequence Red =Cloning site Green =Tags(s)
	MSASAGGSHQPSQSRAIPTRTVAISDAAQLPQDYCTTPGGTLFSTTPGGTRIIYDRKFLDDRNSPMAQT PPCHLPNIPGVTSPGALIEDSKVEVNNLNNLNNHDKHAVGDEAQFEMDI
	TR TRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	12.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_034254
Locus ID:	13688
UniProt ID:	P70445 , Q3UFP6
RefSeq Size:	1786
Cytogenetics:	10 32.21 cM
RefSeq ORF:	363



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Synonyms: 4E-BP2; 2810011I19Rik; AA792569; BC010348; PHAS-II

Summary: 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).[UniProtKB/Swiss-Prot Function]