

Product datasheet for **MR200578L4V**

Eif4ebp2 (NM_010124) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Eif4ebp2 (NM_010124) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Eif4ebp2
Synonyms:	4E-BP2; 2810011119Rik; AA792569; BC010348; PHAS-II
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_010124
ORF Size:	363 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR200578).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_010124.2 , NP_034254.1
RefSeq Size:	1786 bp
RefSeq ORF:	363 bp
Locus ID:	13688
UniProt ID:	P70445
Cytogenetics:	10 32.21 cM



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Gene 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]