

OriGene Technologies, Inc.

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Product datasheet for MR222350L4V

Cbfb (NM_001161456) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Cbfb (NM_001161456) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Cbfb
Synonyms:	Al893578; PEA2; Pebp2; PEBP2b; Pebpb2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001161456
ORF Size:	444 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR222350).
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. <u>More info</u>
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:	<u>NM 001161456.1, NP 001154928.1</u>
RefSeq Size:	2776 bp
RefSeq ORF:	447 bp
Locus ID:	12400
UniProt ID:	<u>Q08024</u>
Cytogenetics:	8 53.04 cM



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Gene Summary:Forms the heterodimeric complex core-binding factor (CBF) with RUNX family proteins
(RUNX1, RUNX2, and RUNX3). RUNX members modulate the transcription of their target
genes through recognizing the core consensus binding sequence 5'-TGTGGT-3', or very rarely,
5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-
binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding
capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and
promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor
enhancers, LCK, IL3 and GM-CSF promoters (Probable). CBF complexes repress ZBTB7B
transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding
sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic
T cell differentiation (PubMed:18258917).[UniProtKB/Swiss-Prot Function]

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