

Product datasheet for MR222281L4V

OriGene Technologies, Inc.

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Cbfb (NM_001161457) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Cbfb (NM_001161457) 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_001161457

ORF Size: 465 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR222281).

Sequence:

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: <u>NM 001161457.1</u>, <u>NP 001154929.1</u>

 RefSeq Size:
 2797 bp

 RefSeq ORF:
 468 bp

 Locus ID:
 12400

 UniProt ID:
 Q08024

Cytogenetics: 8 53.04 cM







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]