

## Product datasheet for RC211623L2V

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## CBFB (NM\_022845) Human Tagged ORF Clone Lentiviral Particle

## **Product data:**

Product Type: Lentiviral Particles

Product Name: CBFB (NM 022845) Human Tagged ORF Clone Lentiviral Particle

Symbol: CBFB
Synonyms: PEBP2B

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_022845

ORF Size: 561 bp

**ORF Nucleotide** 

Th - OD!

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(RC211623).

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.

**RefSeg:** NM 022845.2

 RefSeq Size:
 3150 bp

 RefSeq ORF:
 564 bp

 Locus ID:
 865

 UniProt ID:
 Q13951

 Cytogenetics:
 16q22.1

**Domains:** CBF beta

**Protein Families:** Druggable Genome, Transcription Factors





MW:

21.8 kDa

**Gene Summary:** 

The protein encoded by this gene is the beta subunit of a heterodimeric core-binding transcription factor belonging to the PEBP2/CBF transcription factor family which master-regulates a host of genes specific to hematopoiesis (e.g., RUNX1) and osteogenesis (e.g., RUNX2). The beta subunit is a non-DNA binding regulatory subunit; it allosterically enhances DNA binding by alpha subunit as the complex binds to the core site of various enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers and GM-CSF promoters. Alternative splicing generates two mRNA variants, each encoding a distinct carboxyl terminus. In some cases, a pericentric inversion of chromosome 16 [inv(16)(p13q22)] produces a chimeric transcript consisting of the N terminus of corebinding factor beta in a fusion with the C-terminal portion of the smooth muscle myosin heavy chain 11. This chromosomal rearrangement is associated with acute myeloid leukemia of the M4Eo subtype. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]