

Product datasheet for **TG500286**

Cbfb Mouse shRNA Plasmid (Locus ID 12400)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cbfb Mouse shRNA Plasmid (Locus ID 12400)
Locus ID:	12400
Synonyms:	AI893578; PEA2; Pebp2; PEBP2b; Pebpb2
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cbfb - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 12400). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	BC006763 , BC026749 , BC040752 , NM_001161456 , NM_001161457 , NM_001161458 , NM_022309 , NM_022309.1 , NM_022309.2 , NM_022309.3 , NM_022309.4 , NM_001161457.1 , NM_001161456.1 , NM_001161458.1
UniProt ID:	Q08024
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 CBF 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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).