CBF Beta (CBFB) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CBF beta (CBFB), Polyclonal Antibody
Full Product Name	CBF beta Conjugated Antibody
Product Gene Name	anti-CBFB antibody
Product Synonym Names	Core-binding factor subunit beta; CBF-beta; Polyomavirus enhancer-binding protein 2 beta subunit; PEBP2-beta; PEA2-beta
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Specificity	The antibody detects endogenous levels of total CBF-beta protein.
Preparation and Storage	Store at 4 degree C for 6 months.
Molecular Weight	21,508 Da
Chromosome Location	Chromosome: 16; NC_000016.9 (67063050..67134961). Location: 16q22.1
OMIM	121360
3D Structure	ModBase 3D Structure for Q13951
Immunogen	Synthesized peptide derived from internal of human CBF beta-.
Conjugation	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Excitation Emission	AF350: 346nm/442nm
Applications Tested/Suitable for anti-CBFB antibody	Most Applications
Application Notes for anti-CBFB antibody	Suggested Dilution: AF350 conjugated: most applications: 1:50-1:250 AF405 conjugated: most applications: 1:50-1:250 AF488 conjugated: most applications: 1:50-1:250 AF555 conjugated: most applications: 1:50-1:250 AF594 conjugated: most applications: 1:50-1:250 AF647 conjugated: most applications: 1:50-1:250 AF680 conjugated: most applications: 1:50-1:250 AF750 conjugated: most applications: 1:50-1:250 Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1:50-1:1000
Related Product Information for anti-CBFB antibody	CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters. CBFB enhances DNA binding by RUNX1.
Other Notes	Small volumes of anti-CBFB antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CBFB purchase	MBS9444765 is an antibody targeting CBFB. Also known as CBF beta Conjugated Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CBFB. It may not necessarily be applicable to this product.

NCBI GI #	13124873
NCBI GeneID	865
NCBI Accession #	NP_001746.1
UniProt Primary Accession #	Q13951
UniProt Secondary Accession #	Q13124; Q9HCT2; A8K347
UniProt Related Accession #	Q13951
GenBank Nucleotide #	NM_001755.2
NCBI Official Full Name	core-binding factor subunit beta isoform 2
NCBI Official Synonym Full Names	core-binding factor, beta subunit
NCBI Official Symbol	CBFB
NCBI Official Synonym Symbols	PEBP2B
UniProt Protein Name	Core-binding factor subunit beta
UniProt Synonym Protein Names	Polyomavirus enhancer-binding protein 2 beta subunit; PEA2-beta; PEBP2-beta; SL3-3 enhancer factor 1 subunit beta; SL3/AKV core-binding factor beta subunit
Protein Family	Core-binding factor
UniProt Gene Name	CBFB
UniProt Synonym Gene Names	CBF-beta; PEA2-beta; PEBP2-beta
UniProt Entry Name	PEBB_HUMAN
NCBI Protein Information	core-binding factor subunit beta; CBF-beta; PEA2-beta; PEBP2-beta; SL3-3 enhancer factor 1 beta subunit; SL3-3 enhancer factor 1 subunit beta; SL3/AKV core-binding factor beta subunit; polyomavirus enhancer-binding protein 2 beta subunit; polyomavirus enh
NCBI Summary for CBFB	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 core-binding 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]

UniProt Comments for CBFB	CBFB: CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM- CSF promoters. CBFB enhances DNA binding by RUNX1. A chromosomal aberration involving CBFB is associated with acute myeloid leukemia of M4EO subtype. Pericentric inversion inv(16)(p13;q22). The inversion produces a fusion protein that consists of the 165 N-terminal residues of CBF-beta (PEPB2) with the tail region of MYH11. Belongs to the CBF-beta family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Oncoprotein; DNA-binding; Transcription factor Chromosomal Location of Human Ortholog: 16q22.1 Cellular Component: membrane; nucleus Molecular Function: protein binding; DNA binding; transcription coactivator activity; transcription factor activity Biological Process: osteoblast differentiation; transcription from RNA polymerase II promoter; lymphocyte differentiation; cell maturation; myeloid cell differentiation; positive regulation of transcription from RNA polymerase II promoter
Research Articles on CBFB	**1.** These separation-of-function mutants demonstrate that HIV-1 Vif and the RUNX transcription factors interact with cellular CBFbeta on genetically distinct surfaces.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/cbf-beta/9444765