

## Core-binding factor subunit beta Antibody

Mouse Monoclonal Antibody [Clone PCR-P-CBFB-1A8]

Catalog No	Format	Size
865-MSM6-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
865-MSM6-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
865-MSM6-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dilution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	

### Product Details

<b>Clone</b>	PCR-P-CBFB-1A8
<b>Immunogen</b>	Recombinant human CBFB protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2 / Kappa
<b>Mol. Weight of Antigen</b>	21.51kDa
<b>Cellular Localization</b>	Nucleus
<b>Species Reactivity</b>	Human

\*Optimal dilution for a specific application should be determined.

### Product Images for Core-binding factor subunit beta Antibody

#### Specificity & Comments

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. 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. (Microbial infection) Following infection, hijacked by the HIV-1 Vif protein, leading to the formation a cullin-5-RING E3 ubiquitin-protein ligase complex (ECS complex) that catalyzes ubiquitination and degradation of APOBEC3F and APOBEC3G (PubMed:22190037, PubMed:31792451, PubMed:36598981, PubMed:36754086, PubMed:37419875). The complex can also ubiquitinate APOBEC3H to some extent (PubMed:37640699). Association with HIV-1 Vif protein also inhibits the transcription coactivator activity of CBFB/CBF-beta (PubMed:22190037).

#### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

#### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.