

## **CBFB Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP6905c

## **Specification**

## **CBFB Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

# CBFB Antibody (Center) Blocking Peptide - Additional Information

Gene ID 865

#### **Other Names**

Core-binding factor subunit beta, CBF-beta, 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, CBFB

Q13951

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6905c>AP6905c</a> was selected from the Center region of human CBFB. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

## **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# **CBFB Antibody (Center) Blocking Peptide - Protein Information**

### **Name CBFB**

### **Function**

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.



**Cellular Location**Nucleus {ECO:0000250|UniProtKB:Q08024}.

# **CBFB Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

**CBFB Antibody (Center) Blocking Peptide - Images** 

**CBFB Antibody (Center) Blocking Peptide - Background** 

CBFB 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.

**CBFB Antibody (Center) Blocking Peptide - References** 

Andersen, C.L., et.al., Br. J. Cancer 100 (3), 511-523 (2009)