

CBFB Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6905c**Specification**

CBFB Antibody (Center) - Product Information

Application	WB, IF, FC, IHC-P,E
Primary Accession	Q13951
Other Accession	Q08024
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	21508
Antigen Region	61-90

CBFB Antibody (Center) - 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

Target/Specificity

This CBFB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 61-90 amino acids from the Central region of human CBFB.

Dilution

WB~~1:1000
IF~~1:10~50
FC~~1:10~50
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CBFB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CBFB Antibody (Center) - 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'-TGC GGT-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.

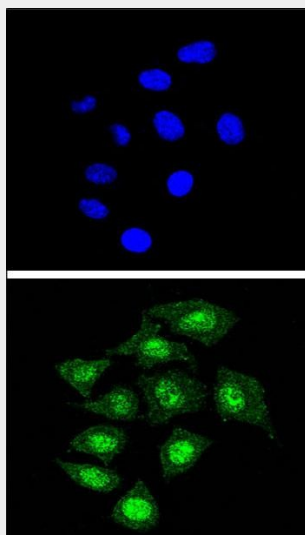
Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q08024}.

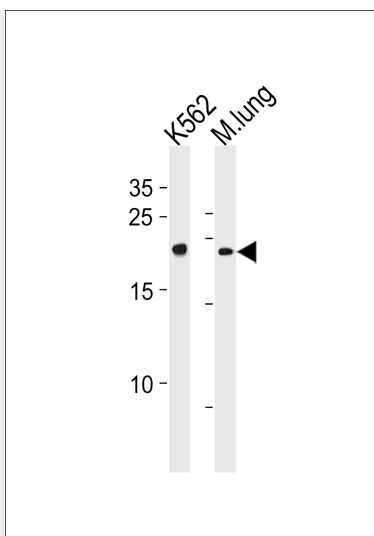
CBFB Antibody (Center) - Protocols

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

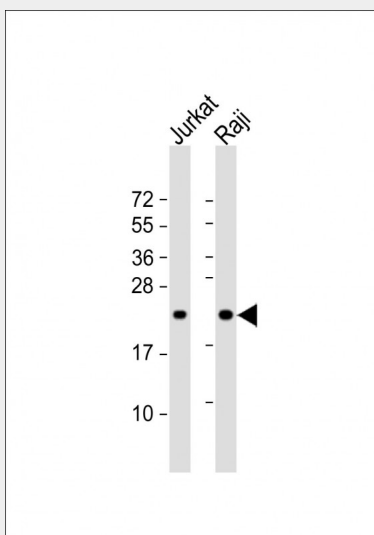
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CBFB Antibody (Center) - Images

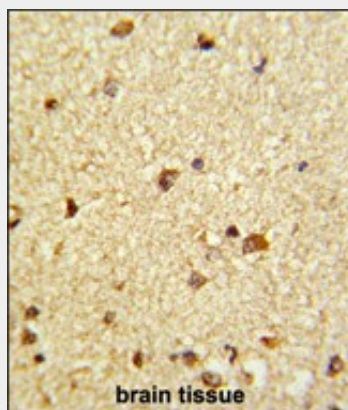
Confocal immunofluorescent analysis of CBFB Antibody (Center) (Cat. #AP6905c) with 293 cells followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclei (blue).



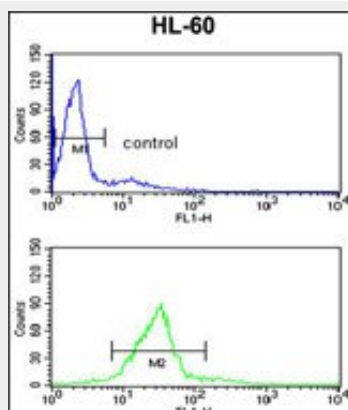
CBFB Antibody (Center) (Cat. #AP6905c) western blot analysis in K562 cell line and mouse lung tissue lysates (35ug/lane). This demonstrates the CBFB antibody detected the CBFB protein (arrow).



All lanes : Anti-CBFB Antibody (Center) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CBFB Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CBFB Antibody (Center) (Cat. #AP6905c) flow cytometry analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CBFB Antibody (Center) - 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) - References

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