

Datasheet for ABIN5693076  
**anti-CBFB antibody (AA 1-182)**



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4 Images

### Overview

Quantity:	100 µg
Target:	CBFB
Binding Specificity:	AA 1-182
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CBFB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

### Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human CBFB recombinant protein (Position: M1-P182).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for CBFB detection. Tested with WB, IHC-P, Direct ELISA in Human, Mouse, Rat.

### Target Details

Target:	CBFB
Alternative Name:	CBFB ( <a href="#">CBFB Products</a> )
Background:	Synonyms: Core-binding factor subunit beta, CBF-beta, Polyomavirus enhancer-binding protein

## Target Details

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2 beta subunit, PEA2-beta, PEBP2-beta, SL3-3 enhancer factor 1 subunit beta, SL3/AKV core-binding factor beta subunit, CBFβ

Background: Core-binding factor subunit beta is a protein that in humans is encoded by the CBFβ gene. 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.

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UniProt: [Q13951](#)

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Pathways: [Regulation of Lipid Metabolism by PPARalpha](#)

## Application Details

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Application Notes: Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).

Application Details: Western blot, 0.1-0.5 µg/mL

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL

Direct ELISA, 0.1-0.5 µg/mL

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

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Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

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Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg NaN<sub>3</sub>.

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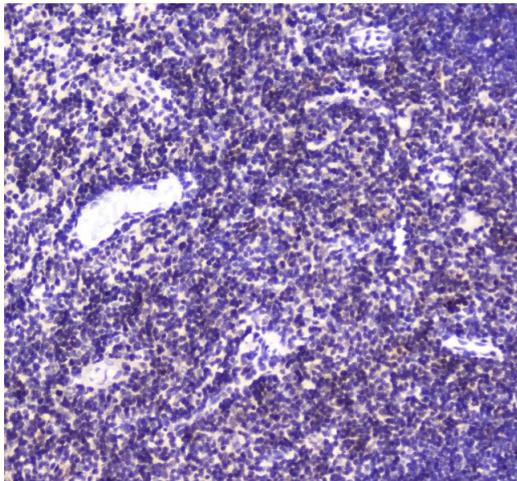
Preservative: Sodium azide

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## Handling

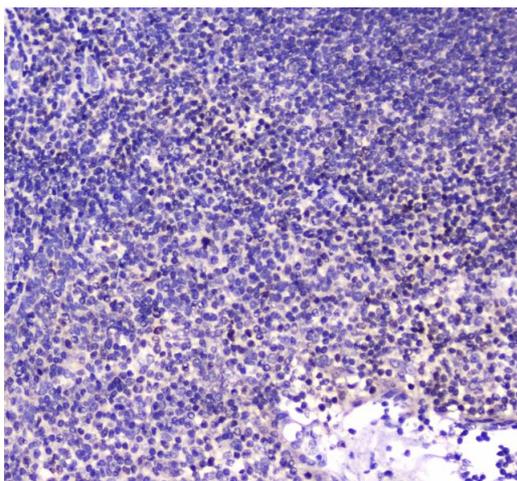
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

## Images



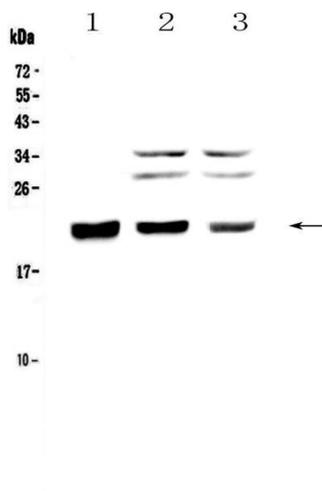
### Immunohistochemistry

**Image 1.** IHC analysis of CBFb using anti-CBFb antibody . CBFb was detected in paraffin-embedded section of rat thymus tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CBFb Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



### Immunohistochemistry

**Image 2.** IHC analysis of CBFb using anti-CBFb antibody . CBFb was detected in paraffin-embedded section of human tonsil tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CBFb Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



### Western Blotting

**Image 3.** Western blot analysis of CBFb using anti-CBFb antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human SW620 whole cell lysates, Lane 2: rat thymus tissue lysates, Lane 3: mouse thymus tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CBFb antigen affinity purified polyclonal antibody (Catalog # ) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CBFb at approximately 22KD. The expected band size for CBFb is at 22KD.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5693076.