

### KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1223

#### **Specification**

## KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession 013951

Reactivity Rat, Human, Mouse Clonality Monoclonal

Isotype Rabbit IgG

Calculated MW Predicted, 22 kDa , observed, 22 kDa KDa

Gene Name CB

Aliases

CBFB; Core-Binding Factor Subunit Beta;

PEBP2B; SL3/AKV Core-Binding Factor Beta

Subunit; SL3-3 Enhancer Factor 1 Subunit

Beta; Core-Binding Factor Beta Subunit;

PEBP2-Beta; PEA2-Beta; CBF-Beta;

Polyomavirus Enhancer Binding Protein 2,

**Beta Subunit; Polyomavirus** 

Enhancer-Binding Protein 2 Beta Subunit; SL3-3 Enhancer Factor 1 Beta Subunit; Core-Binding Factor, Beta Subunit; CLCD2

Immunogen A synthesized peptide derived from human

**CBFb** 

# KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody - 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

## KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody - 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**

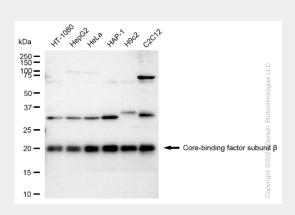
Nucleus {ECO:0000250|UniProtKB:Q08024}.

## KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody - Protocols

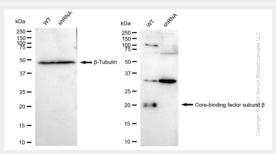
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### KD-Validated Anti-Core-binding factor subunit beta Rabbit Monoclonal Antibody - Images



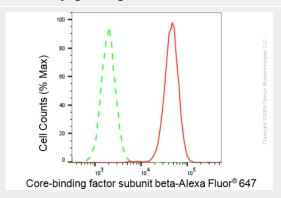
Western blotting analysis using anti-Core-binding factor subunit beta antibody (Cat#AGI1223). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Core-binding factor subunit beta antibody (Cat#AGI1223, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Core-binding factor subunit beta antibody (Cat#AGI1223). Core-binding factor subunit beta expression in wild type (WT) and Core-binding factor subunit beta shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Core-binding factor subunit beta antibody



(Cat#AGI1223, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Core-binding factor subunit beta expression in HAP-1 cells using Core-binding factor subunit beta antibody (Cat#AGI1223, 1:2,000). Green, isotype control; red, Core-binding factor subunit beta.