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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	Q13951
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 22 kDa , observed, 22 kDa KDa**
Gene Name	**CBFB**
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.

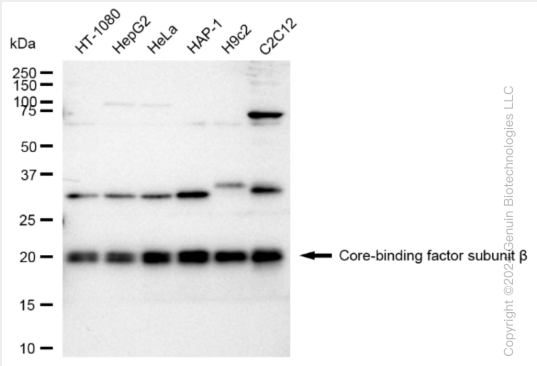
Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q08024}.

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

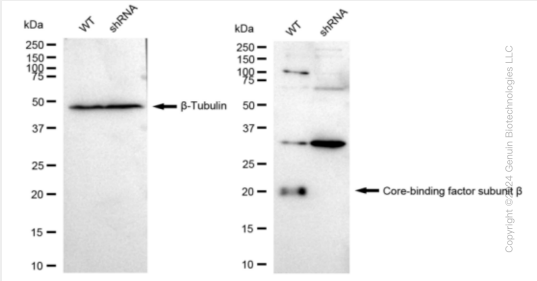
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- 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#61442). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Core-binding factor subunit beta antibody (Cat#61442, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-Core-binding factor subunit beta antibody (Cat#61442). Core-binding factor subunit beta expression in wild type (WT) and Core-binding factor subunit beta shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a

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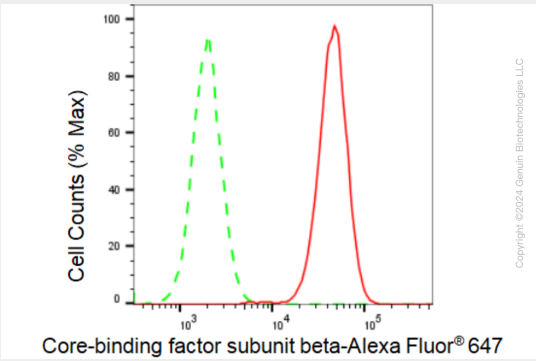
loading control. The blot was incubated with anti-Core-binding factor subunit beta antibody (Cat#61442, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of Core-binding factor subunit beta expression in HAP-1 cells using Core-binding factor subunit beta antibody (Cat#61442, 1:2,000). Green, isotype control; red, Core-binding factor subunit beta.