

**Product Name: PEBP2 $\beta$  Rabbit Polyclonal Antibody****Catalog #: APRab15949**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Rabbit polyclonal Antibody  |
| <b>Host</b>          | Rabbit  |
| <b>Application</b>   | WB,IHC,ICC/IF,ELISA   |
| <b>Reactivity</b>    | Human,Mouse,Rat   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | IgG   |
| <b>Clonality</b>     | Polyclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.                       |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| <b>Purification</b>  | Affinity purification   |

**Application**

|                         |   |
|-------------------------|---|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000 |
| <b>Molecular Weight</b> | 22kDa   |

**Antigen Information**

|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | CBFB<br>CBFB; Core-binding factor subunit beta; CBF-beta; Polyomavirus enhancer-binding protein 2                   |
| <b>Alternative Names</b> | beta subunit; PEA2-beta; PEBP2-beta; SL3-3 enhancer factor 1 subunit beta; SL3/AKV core-binding factor beta subunit |
| <b>Gene ID</b>           | 865.0   |
| <b>SwissProt ID</b>      | Q13951  |
| <b>Immunogen</b>         | The antiserum was produced against synthesized peptide derived from human CBF beta. AA range:11-60                  |

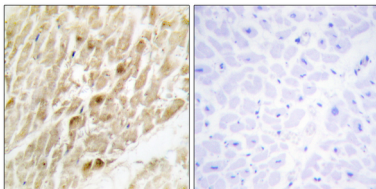
## Background

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. disease: A chromosomal aberration involving CBFβ is associated with acute myeloid leukemia of M4EO subtype. Pericentric inversion inv(16)(p13;q22). The inversion produces a fusion protein that consists of the 165 N-terminal residues of CBF-beta (PEPB2) with the tail region of MYH11. function: CBF binds to the core site, 5'-PYGPGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL-3 and GM-CSF promoters. CBFβ enhances DNA binding by RUNX1. similarity: Belongs to the CBF-beta family. subunit: Heterodimer with RUNX1.

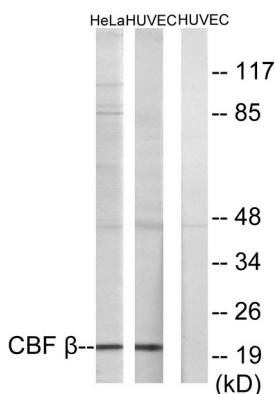
## Research Area

Epigenetics and Nuclear Signaling

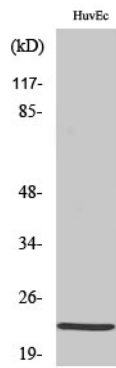
## Image Data



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using CBF beta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HUVEC and HeLa cells, using CBF beta Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using PEBP2 $\beta$  Polyclonal Antibody.