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|--------------------------|----------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | PEBP2 $\beta$ Rabbit Polyclonal Antibody                                                           |
| <b>Cat number:</b>       | ABN15949                                                                                           |
| <b>Conjugate:</b>        | Unconjugated                                                                                       |
| <b>Size:</b>             | 100 $\mu$ L                                                                                        |
| <b>Clone:</b>            | Polyclonal                                                                                         |
| <b>Concentration:</b>    | 1mg/ml                                                                                             |
| <b>Host:</b>             | Rabbit                                                                                             |
| <b>Isotype:</b>          | IgG                                                                                                |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human CBF beta. AA range:11-60 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                    |
| <b>Applications:</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                                                                                              |
| <b>Purification:</b>     | Affinity purification                                                                              |
| <b>Form:</b>             | Liquid                                                                                             |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                 |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.       |

**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 CBF $\beta$  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'-PYGPYGGT-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. CBF $\beta$  enhances DNA binding by RUNX1. similarity: Belongs to the CBF-beta family. subunit: Heterodimer with RUNX1.