



# PEBP2 $\beta$ Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01935
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CBFB
<b>Protein Name</b>	Core-binding factor subunit beta
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CBF beta. AA range:11-60
<b>Specificity</b>	PEBP2 $\beta$ Polyclonal Antibody detects endogenous levels of PEBP2 $\beta$ protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CBFB; 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
<b>Observed Band</b>	22kD
<b>Cell Pathway</b>	Nucleus .
<b>Tissue Specificity</b>	Brain, Eye,
<b>Function</b>	disease:A chromosomal aberration involving CBFB 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. CBFB enhances DNA binding by RUNX1.,similarity:Belongs to the CBF-beta family.,subunit:Heterodimer with RUNX1.,
<b>Background</b>	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.

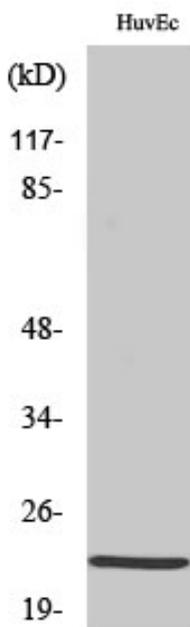
**matters needing attention**

Avoid repeated freezing and thawing!

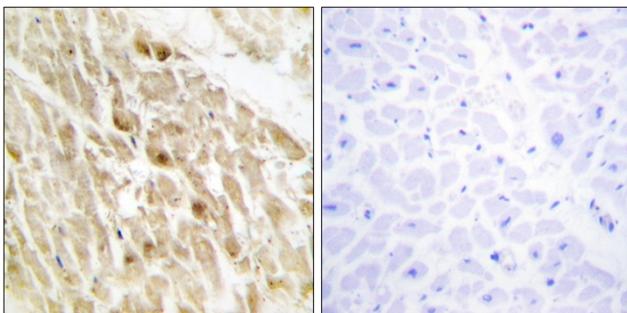
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

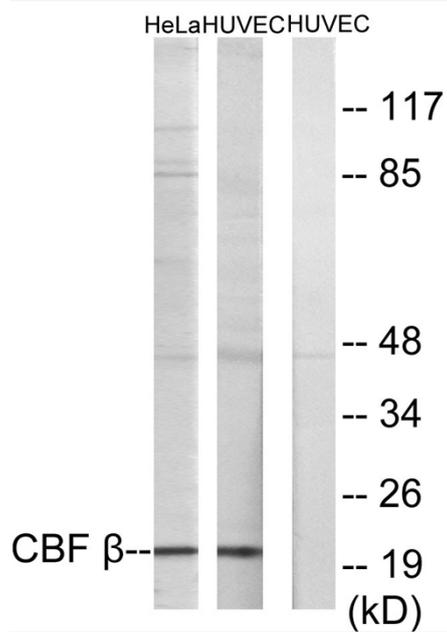
## Products Images



Western Blot analysis of various cells using PEBP2 $\beta$  Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



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.