



Recombinant Human Core-binding factor subunit beta (CBFB)

Product Code	CSB-EP623835HU-B
Abbreviation	CBFB
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q13951
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	MPRVVPDQRS KFENEEFFRK LSRECEIKYT GFRDRPHEER QARFQNACRD GRSEIAFVAT GTNLSLQFFP ASWQGEQRQT PSREYVDLER EAGKVYLKAP MILNGVCVIW KGWIDLQRLD GMGCLEFDEE RAQQEDALAQ QAFEEARRRT REFEDRDRSH REEMEVRSQ LLAVTGKKTT RP
Source	E.coli
Target Names	CBFB
Protein Names	Recommended name: Core-binding factor subunit beta Short name= CBF-beta Alternative name(s): Polyomavirus enhancer-binding protein 2 beta subunit Short name= PEA2-beta Short name= PEBP2-beta SL3-3 enhancer factor 1 subunit
Expression Region	1-182
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	This protein 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. This chromosomal rearrangement



is associated with acute myeloid leukemia of the M4Eo subtype. Two transcript variants encoding different isoforms have been found for this gene.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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