

## CBFB (Human) Recombinant Protein (Q01)

Catalog # H00000865-Q01 Size 25 ug, 10 ug

## Applications



| Specification                    |   |
|----------------------------------|---|
| Product Description              | Human CBFB partial ORF ( NP_001746, 74 a.a 163 a.a.) recombinant protein with GST-tag at N-t erminal. |
| Sequence                         | QGEQRQTPSREYVDLEREAGKVYLKAPMILNGVCVIWKGWIDLQRLDGMGCLEFDEERAQQEDA<br>LAQQAFEEARRRTREFEDRDRSHREE        |
| Host                             | Wheat Germ (in vitro)   |
| Theoretical MW (kDa)             | 35.64   |
| Interspecies Antigen<br>Sequence | Mouse (99); Rat (99)  |
| Preparation Method               | in vitro wheat germ expression system   |
| Purification                     | Glutathione Sepharose 4 Fast Flow   |
| Quality Control Testing          | 12.5% SDS-PAGE Stained with Coomassie Blue.   |
| Storage Buffer                   | 50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.                              |
| Storage Instruction              | Store at -80°C. Aliquot to avoid repeated freezing and thawing.                                       |
| Note                             | Best use within three months from the date of receipt of this protein.                                |



## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

| Gene Info — CBFB    |  |
|---------------------|--|
| Entrez GenelD       | <u>865</u>   |
| GeneBank Accession# | <u>NM_001755</u>   |
| Protein Accession#  | <u>NP_001746</u>   |
| Gene Name           | CBFB   |
| Gene Alias          | PEBP2B   |
| Gene Description    | core-binding factor, beta subunit  |
| Omim ID             | <u>121360</u>  |
| Gene Ontology       | Hyperlink  |
| Gene Summary        | 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 g enes 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 a s the complex binds to the core site of various enhancers and promoters, including murine leukem ia virus, polyomavirus enhancer, T-cell receptor enhancers and GM-CSF promoters. Alternative s plicing 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 consi sting of the N terminus of core-binding factor beta in a fusion with the C-terminal portion of the sm ooth 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. [provided by RefSeq |
| Other Designations  | SL3-3 enhancer factor 1 beta subunit SL3/AKV core-binding factor beta subunit polyomavirus enh ancer binding protein 2, beta subunit   |