

# CBFB FISH Probe

Catalog # FA0370      Size 200 uL

## Specification

<b>Product Description</b>	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. ( <a href="#">Technology</a> ).
<b>Origin</b>	Human
<b>Source</b>	Genomic DNA
<b>Reactivity</b>	Human
<b>Notice</b>	We <b>strongly recommend</b> the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: <a href="#">KA2375</a> or <a href="#">KA2691</a> ) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
<b>Regulation Status</b>	For research use only (RUO)
<b>Supplied Product</b>	DAPI Counterstain (1500 ng/mL ) 250 uL
<b>Storage Instruction</b>	Store at 4°C in the dark.

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

## Gene Info — CBFB

<b>Entrez GeneID</b>	<a href="#">865</a>
<b>Gene Name</b>	CBFB
<b>Gene Alias</b>	PEBP2B
<b>Gene Description</b>	core-binding factor, beta subunit

Omim ID [121360](#)

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 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. [provided by RefSeq]

**Other Designations**

SL3-3 enhancer factor 1 beta subunit|SL3/AKV core-binding factor beta subunit|polyomavirus enhancer binding protein 2, beta subunit