Recombinant CEBPB protein (His tag)

Catalog Number	537579
Synonyms	C/EBP beta; Liver activator protein; LAP; Liver-enriched inhibitory protein; LIP; Nuclear factor NF-IL6; Transcription factor 5; TCF-5
Species	Human
Expression System	E. coli
Accession	P17676
Molecular Weight	Predictes a molecular mass of 11.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	265-345
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 265-345 aa (P17676) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human C/EBP Beta (C/EBPB) bZIP Domain Fragment (aa 265-345) - A high-purity protein fragment containing the complete bZIP functional domain, ideal for studying transcription factor mechanisms, DNA binding interactions, and regulatory functions in immune response, inflammation, and cellular differentiation pathways. CCAAT/enhancer-binding protein beta (C/EBPβ) is a crucial transcription factor that regulates genes involved in immune and inflammatory responses, adipogenesis, gluconeogenesis, liver regeneration, and hematopoiesis. The full-length protein recognizes the consensus DNA sequence 5'-T[TG]NNGNAA[TG]-3' and functions primarily in the nucleus, though it can also localize to the cytoplasm. C/EBPβ plays diverse roles including promitotic effects in hepatocytes and adipocytes, antiproliferative effects in T-cells by repressing MYC expression, regulation of acute-phase reactions, and essential functions in ovarian follicle development and osteoclastogenesis restriction. The protein's activity is modulated through protein interactions and post-translational modifications, with different isoforms exhibiting distinct functions - isoform 2 is critical for macrophage activation and immune responses, while isoform 3 acts as a dominant negative through heterodimerization.