Recombinant COE2 protein (His tag)

Catalog Number	548271
Synonyms	Early B-cell factor 2; EBF-2
Species	Human
Expression System	E. coli
Accession	Q9HAK2
Molecular Weight	Predictes a molecular mass of 42.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	34-398
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 34-398 aa (Q9HAK2) 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 Transcription factor COE2 (EBF-2) fragment (amino acids 34-398) is a high-purity protein designed for functional studies. This fragment includes the complete IPT/TIG domain, making it an ideal tool for investigating domain-specific roles in transcriptional regulation and osteoclast differentiation pathways. Transcription factor COE2 (Early B-cell factor 2), encoded by the EBF2 gene in Homo sapiens, functions as a key regulator in osteoblasts by activating the decoy receptor for RANKL (TNFRSF11B), thereby modulating osteoclast differentiation. It operates synergistically with the Wnt-responsive LEF1/CTNNB1 pathway and recognizes palindromic DNA sequences (5'-ATTCCCNNGGGAATT-3'). The protein is localized to the nucleus, where it exerts its transcriptional activities, underscoring its importance in bone metabolism and cellular signaling processes.