Recombinant GDF10 protein (His tag)

Catalog Number	544716
Synonyms	GDF-10; Bone morphogenetic protein 3B; BMP-3B; Bone-inducing protein; BIP
Species	Human
Expression System	E. coli
Accession	P55107
Molecular Weight	Predictes a molecular mass of 14.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	369-478
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 369-478 aa (P55107) 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 Growth/Differentiation Factor 10 (GDF-10) Fragment (369-478) is a high-purity protein designed for structural and biochemical studies. This 110-amino acid fragment, derived from the Homo sapiens GDF10 gene, represents a stable and soluble unit ideal for investigating GDF-10's roles in osteogenesis and adipogenesis. Growth/Differentiation Factor 10 (GDF-10), also known as Bone Morphogenetic Protein 3B (BMP-3B), is a secreted human protein that functions as a growth factor in osteogenesis and adipogenesis. It plays an inhibitory role in osteoblast differentiation through the SMAD2/3 signaling pathway and similarly suppresses adipogenesis. As a secreted protein, GDF-10 functions extracellularly, making it accessible for therapeutic and research applications targeting bone and fat cell regulation.