Recombinant CALC protein (His tag)

Catalog Number	546640
Synonyms	CT; Calcitonin carboxyl-terminal peptide; CCP; PDN-21
Species	Human
Expression System	E. coli
Accession	P01258
Molecular Weight	Predictes a molecular mass of 12.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-100
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-100 aa (P01258) 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	This recombinant protein product features a 100-amino acid fragment (residues 1-100) of human Calcitonin, a key peptide hormone involved in calcium and phosphate regulation. The fragment is designed for stability and solubility, making it ideal for structural studies, biochemical assays, and research on bone metabolism pathways. Calcitonin, encoded by the CALCA gene in Homo sapiens, is a secreted peptide hormone that rapidly lowers blood calcium and phosphate levels by promoting their incorporation into bone. Its function is mediated through the calcitonin receptor (CALCR) and the CALCR-RAMP2 receptor complex. The full-length protein is cleaved into two bioactive peptides: Calcitonin (CT), which regulates calcium homeostasis, and Katacalcin (CCP/PDN-21), a potent plasma calcium-lowering peptide. As a secreted protein, Calcitonin functions extracellularly, playing a critical role in skeletal health and mineral balance.