Recombinant PIT1 protein (His tag)

Catalog Number	537652
Synonyms	PIT-1; Growth hormone factor 1; GHF-1
Species	Human
Expression System	E. coli
Accession	P28069
Molecular Weight	Predictes a molecular mass of 21.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	125-291
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 125-291 aa (P28069) 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 PIT-1 (Pituitary-specific positive transcription factor 1) Fragment (aa 125-291) is a high-purity protein designed for structural and functional studies. This 167-amino acid fragment, derived from the human POU1F1 gene, represents a stable and soluble unit ideal for investigating transcription factor mechanisms in pituitary development and hormone regulation. PIT-1, encoded by the POU1F1 gene, is a critical transcription factor responsible for specifying lactotrope, somatotrope, and thyrotrope cell lineages during anterior pituitary development. It binds specifically to the DNA consensus sequence 5'-TAAAT-3' and activates key hormone genes including growth hormone and prolactin, playing an essential role in endocrine system function. The protein localizes to the nucleus, where it executes its transcriptional regulatory activities. This fragment was computationally selected to provide a stable, soluble representation of the protein suitable for biochemical and structural analyses.