Recombinant REG1A protein (His tag)

Catalog Number	537432
Synonyms	Islet cells regeneration factor; ICRF; Islet of Langerhans regenerating protein; REG; Pancreatic stone protein; PSP; Pancreatic thread protein; PTP; Regenerating islet-derived protein 1-alpha; REG-1-alpha; Regenerating protein I alpha
Species	Human
Expression System	E. coli
Accession	P05451
Molecular Weight	Predictes a molecular mass of 17.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	23-166
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 23-166 aa (P05451) 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	Introducing the recombinant human Lithostathine-1-alpha (REG-1-alpha) fragment, a high-purity protein encompassing the C-type lectin domain (residues 23-166). This fragment serves as an essential tool for investigating the protein's roles in neuronal sprouting, tissue regeneration, and calcium carbonate precipitation inhibition, making it ideal for functional and mechanistic studies. Lithostathine-1-alpha, encoded by the REG1A gene, is a secreted protein in humans that may function as an inhibitor of spontaneous calcium carbonate precipitation. It is implicated in neuronal sprouting in the brain and has been associated with regeneration processes in both the brain and pancreas. As a secreted protein, it operates extracellularly, influencing cellular environments and regenerative pathways. The provided fragment spans residues 23-166, fully containing the C-type lectin domain, enabling focused research on this functional region without interference from other protein segments.