Recombinant CTF1 protein (His tag)

Catalog Number	547371
Synonyms	CT-1
Species	Human
Expression System	E. coli
Accession	Q16619
Molecular Weight	Predictes a molecular mass of 22.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	1-201
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 1-201 aa (Q16619) 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 Cardiotrophin-1 (CT-1) Fragment (1-201) is a high-quality protein preparation designed for research applications. This carefully selected fragment maintains the essential functional characteristics of the full-length protein, offering researchers a stable and soluble tool for studying cardiac myocyte hypertrophy and ILST/gp130 receptor signaling pathways. Cardiotrophin-1 (CT-1) is a secreted protein encoded by the CTF1 gene in humans that plays a crucial role in cardiac biology. The protein functions by inducing cardiac myocyte hypertrophy in vitro, making it an important factor in cardiac development and potentially in pathological conditions. CT-1 exerts its biological effects by binding to and activating the ILST/gp130 receptor complex, initiating downstream signaling cascades. As a secreted protein, CT-1 operates through paracrine or endocrine mechanisms, allowing it to influence target cells in its microenvironment. The selected fragment (amino acids 1-201) represents a stable, soluble unit that preserves the key functional domains necessary for receptor binding and biological activity.