Recombinant BCS1 protein (His tag)

Catalog Number	541579
Synonyms	h-BCS1; BCS1-like protein
Species	Human
Expression System	E. coli
Accession	Q9Y276
Molecular Weight	Predictes a molecular mass of 45.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	33-419
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 33-419 aa (Q9Y276) 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 mitochondrial chaperone BCS1 (h-BCS1) fragment (residues 33-419) is a high-quality protein designed for structural and biochemical studies. This stable, soluble fragment retains key functional characteristics, enabling research into mitochondrial respiratory chain assembly and chaperone activity. The full-length BCS1 protein, encoded by the BCS1L gene in Homo sapiens, functions as an essential chaperone required for the incorporation of the Rieske iron-sulfur protein UQCRFS1 into mitochondrial respiratory chain complex III. It plays a critical role in maintaining mitochondrial tubular networks, respiratory chain assembly, and formation of the LETM1 complex. BCS1 localizes to the mitochondrial inner membrane as a single-pass membrane protein, underscoring its importance in mitochondrial function and energy production pathways.