Recombinant CERKL protein (His tag)

Catalog Number	540423
Species	Human
Expression System	E. coli
Accession	Q49MI3
Molecular Weight	Predictes a molecular mass of 35.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	251-558
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 251-558 aa (Q49MI3) 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 Ceramide Kinase-like Protein (CERKL) Fragment (aa 251-558) - A stable, soluble protein fragment ideal for structural studies and biochemical analysis of this apoptosis-regulating protein. The full-length Ceramide kinase-like protein (CERKL), encoded by the CERKL gene in humans, plays a crucial role in cellular protection against oxidative stress. Although it lacks detectable ceramide-kinase activity, CERKL overexpression has been demonstrated to protect cells from apoptosis under oxidative stress conditions, highlighting its importance in cellular survival pathways. The protein exhibits complex subcellular localization, primarily residing in the cytoplasm and nucleus with enrichment in nucleoli. It may shuttle between nuclear and cytoplasmic compartments, and specific isoforms show additional localization to the Golgi apparatus, trans-Golgi network, and endoplasmic reticulum, suggesting diverse functional roles in different cellular contexts.