Recombinant CERS4 protein (His tag)

Catalog Number	541287
Synonyms	CerS4; LAG1 longevity assurance homolog 4; Sphingosine N-acyltransferase CERS4
Species	Human
Expression System	E. coli
Accession	Q9HA82
Molecular Weight	Predictes a molecular mass of 12.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	53-139
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 53-139 aa (Q9HA82) 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	This product is a recombinant fragment of human Ceramide Synthase 4 (CerS4), specifically spanning residues 53-139. It represents a stable and soluble unit of the enzyme, optimized for structural and biochemical studies, and retains relevance to CerS4's role in sphingolipid metabolism. Ceramide Synthase 4 (CerS4) is a key enzyme in sphingolipid biosynthesis, catalyzing the formation of ceramide from sphinganine and acyl-CoA substrates with high selectivity for long and very-long chain acyl donors (C18:0-C22:0). This reaction is critical for maintaining cellular membrane integrity and signaling pathways. The full-length protein is localized to the endoplasmic reticulum membrane as a multi-pass membrane protein, underscoring its integral role in lipid metabolism. The provided fragment offers a tractable model for investigating CerS4's functional domains without the complexities of the full membrane-associated protein.