Recombinant STING protein (His tag)

Catalog Number	540653
Synonyms	hSTING; Endoplasmic reticulum interferon stimulator; ERIS; Mediator of IRF3 activation; hMITA; Transmembrane protein 173
Species	Human
Expression System	E. coli
Accession	Q86WV6
Molecular Weight	Predictes a molecular mass of 24.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	135-340
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 135-340 aa (Q86WV6) 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 STING1 Protein Fragment (aa 135-340) is a high-purity, soluble protein fragment derived from the Stimulator of Interferon Genes (STING) protein, a key innate immune sensor. This fragment is engineered for stability and solubility, making it ideal for structural studies, biochemical assays, and research on DNA-sensing pathways and antiviral responses. The full-length STING1 protein (UniProt ID: Q86WV6) is a critical mediator of innate immunity, functioning as a cytosolic DNA sensor that detects bacterial and viral DNA. Upon binding cyclic dinucleotides such as c-di-GMP or cGAMP, STING1 oligomerizes, translocates from the endoplasmic reticulum to the Golgi apparatus, and activates TBK1-mediated phosphorylation of IRF3, leading to type I interferon production. It also plays a direct role in autophagy by facilitating autophagosome formation via ERGIC-derived membranes. STING1 localizes to multiple membranes, including the endoplasmic reticulum, endoplasmic reticulum-Golgi intermediate compartment, Golgi apparatus, and autophagosomes, and its activity can be antagonized by viral oncoproteins. This recombinant fragment (aa 135-340) represents a stable, soluble region selected for experimental applications, supporting research into immune signaling mechanisms.