Recombinant DCST1 protein (His tag)

Catalog Number	547436
Synonyms	DC-STAMP domain-containing protein 1; RING-type E3 ubiquitin transferase
Species	Human
Expression System	E. coli
Accession	Q5T197
Molecular Weight	Predictes a molecular mass of 28.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	137-372
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 137-372 aa (Q5T197) 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 DCST1 Fragment (137-372): A high-quality, soluble protein fragment derived from human E3 ubiquitin-protein ligase DCST1, optimized for structural and biochemical studies. This 236-amino acid fragment offers a stable representation of the protein, facilitating research into ubiquitination mechanisms and cellular signaling pathways. DCST1 (E3 ubiquitin-protein ligase DCST1) is a RING-type E3 ubiquitin transferase that plays a critical role in regulating type-I interferon signaling by mediating 'Lys-48'-linked ubiquitination and proteasomal degradation of STAT2. Additionally, it functions as an essential sperm cell-surface protein required for sperm-egg fusion and fertilization. The full-length protein is localized to the cell membrane and cytoplasmic vesicles, including the acrosome membrane in sperm, where it translocates during the acrosome reaction. This recombinant fragment provides a valuable tool for investigating DCST1's ubiquitin ligase activity and its broader implications in immune regulation and reproductive biology.