Recombinant DCST2 protein (His tag)

Catalog Number	551148
Species	Human
Expression System	E. coli
Accession	Q5T1A1
Molecular Weight	Predictes a molecular mass of 19.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	73-233
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 73-233 aa (Q5T1A1) 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 DC-STAMP domain-containing protein 2 (DCST2) fragment (residues 73-233), a stable and soluble unit derived from human sperm cell-surface protein essential for fertilization. This fragment is optimized for structural and biochemical studies, offering researchers a reliable tool to investigate sperm-egg fusion mechanisms. DC-STAMP domain-containing protein 2 (DCST2) is an essential sperm cell-surface protein required for sperm-egg fusion and successful fertilization. It localizes to cytoplasmic vesicles, secretory vesicles, and the acrosome membrane as a multi-pass membrane protein. Before the acrosome reaction, it resides in the anterior acrosome and translocates to the equatorial segment post-reaction, highlighting its dynamic role in mediating the critical fusion event between sperm and egg during reproduction.