Recombinant CACT protein (His tag)

Catalog Number	531607
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q03017
Gene ID	34969
Molecular Weight	Predictes a molecular mass of 27.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	221-456
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 221-456 aa (Q03017) 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 the NF-kappa-B inhibitor cactus protein from Drosophila melanogaster, encompassing residues 221-456. It is designed to support structural and biochemical studies by providing a stable and soluble unit of this key regulator in the NF-kappa-B signaling pathway. The full-length NF-kappa-B inhibitor cactus plays a critical role in the dorsoventral patterning of Drosophila embryos by inhibiting the nuclear translocation of the dorsal morphogen. It acts as a negative regulator in the NF-kappa-B (rel) signaling pathway, where its degradation by IKKbeta is essential for pathway activation. The protein is localized in the cytoplasm, as supported by experimental evidence, underscoring its function in sequestering NF-kappa-B components to modulate developmental and immune-related signals.