Recombinant KPC2 protein (His tag)

Catalog Number	530919
Synonyms	Eye-PKC; Inactivation no after-potential C protein; Protein INAC; Photoreceptor-specific PKC; dPKC53E(EY)
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P13677
Gene ID	36897
Molecular Weight	Predictes a molecular mass of 40.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	366-700
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 366-700 aa (P13677) 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 fragment of Drosophila melanogaster Protein Kinase C, eye isozyme (inaC), encompassing amino acids 366-700. This fragment contains the complete Protein kinase, AGC-kinase C-terminal domain, making it an ideal tool for studying the specific functions of this critical regulatory domain in photoreceptor inactivation and immune response pathways. Protein Kinase C, eye isozyme (Eye-PKC) is a calcium-activated, phospholipid-dependent serine/threonine-specific enzyme that serves as a key negative regulator of the visual transduction cascade in Drosophila melanogaster. This isozyme is essential for photoreceptor cell inactivation and light adaptation, with its negative regulatory function dependent on interaction with scaffolding protein inaD. Additionally, recent research has revealed its role in gut immune response signaling, where it participates in a hedgehog-signaling pathway that regulates Duox-dependent immune responses to bacterial uracil. The protein is required for activation of Cad99C and subsequent Cad99C-dependent endosome formation, which is essential for reactive oxygen species production in response to intestinal bacterial infection.