Recombinant PGSC2 protein (His tag)

Catalog Number	532907
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9V4X2
Gene ID	35862
Molecular Weight	Predictes a molecular mass of 19.44 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	21-184
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 21-184 aa (Q9V4X2) 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 Peptidoglycan-recognition protein SC2 (EC 3.5.1.28) fragment (residues 21-184) from Drosophila melanogaster, encompassing the complete N-acetylmuramoyl-L-alanine amidase domain. This fragment is an essential tool for investigating innate immune responses through peptidoglycan degradation mechanisms. The full-length Peptidoglycan-recognition protein SC2 is a secreted N-acetylmuramyl-L-alanine amidase that plays a critical role in Drosophila melanogaster's innate immune system. It functions by degrading bacterial peptidoglycans, converting biologically active peptidoglycan fragments into inactive forms, thereby serving as a scavenger molecule to modulate immune responses. While it lacks direct bacteriolytic activity, its amidase function is crucial for regulating peptidoglycan-mediated immune activation. The protein's secretion enables extracellular interaction with bacterial cell wall components in the host environment.