Recombinant GR08A protein (His tag)

Catalog Number	534045
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9W367
Gene ID	31865
Molecular Weight	Predictes a molecular mass of 10.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	176-248
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 176-248 aa (Q9W367) 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	Introducing the recombinant Gustatory receptor 8a (Gr8a) fragment (residues 176-248), a 73-amino acid protein derived from Drosophila melanogaster. This fragment is expertly engineered for stability and solubility, enabling advanced structural and biochemical studies of insect gustatory receptors involved in chemosensory behavior. Gustatory receptor 8a, encoded by the Gr8a gene, is a multi-pass membrane protein localized to the cell membrane in Drosophila melanogaster. It functions as a key gustatory receptor that mediates acceptance or avoidance behaviors in response to chemical stimuli. Notably, it is essential for sensing and avoiding L-canavanine, a plant-derived insecticide, highlighting its critical role in insect survival and chemical defense mechanisms. This receptor's activity underscores the evolutionary adaptations in insect taste perception and toxin avoidance strategies.