Recombinant GR22E protein (His tag)

Catalog Number	534765
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P58953
Gene ID	117498
Molecular Weight	Predictes a molecular mass of 10.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	68-142
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 68-142 aa (P58953) 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 for bitter taste 22e (Gr22e) fragment (residues 68-142), a 75-amino acid protein segment derived from Drosophila melanogaster. This fragment represents a stable, soluble unit ideal for investigating bitter taste perception mechanisms and receptor-ligand interactions in biochemical and structural studies. The full-length Gustatory receptor for bitter taste 22e (Gr22e) is a multi-pass membrane protein localized to the cell membrane in Drosophila melanogaster. It functions as a gustatory receptor that mediates acceptance or avoidance behavior depending on its substrates. Research indicates its specific involvement in bitter taste sensing, as it is expressed in avoidance-type taste neurons that respond to bitter compounds, playing a crucial role in the fly's chemosensory system and feeding behavior (as supported by PubMed:18067151).