Recombinant INX2 protein (His tag)

Catalog Number	533488
Synonyms	Innexin-2; Gap junction protein prp33; Pas-related protein 33
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9V427
Gene ID	31646
Molecular Weight	Predictes a molecular mass of 10.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	288-367
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 288-367 aa (Q9V427) 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 Innexin inx2 (288-367) fragment from Drosophila melanogaster, a stable and soluble protein unit ideal for studying gap junction structure and function. This 80-amino acid fragment retains key structural features while offering enhanced experimental utility for biochemical and structural analyses. Innexin inx2 serves as a structural component of gap junctions in Drosophila melanogaster, facilitating intercellular communication critical for multiple developmental processes. The full-length protein localizes to cell membranes and gap junctions, with specific distribution patterns in various tissues including ovary, epidermis, and salivary glands. Functionally, it enables communication between germline and somatic cells during oogenesis, supports epithelial morphogenesis in embryonic epidermis, and contributes to proventriculus development through wg signaling response. In follicle cells, it regulates egg chamber formation by influencing shg and baz at germ cell-follicle cell boundaries, while in inner germarial sheath cells, it promotes early germ cell survival and cyst formation. The protein exhibits complex subcellular localization, including apical, basolateral, and lateral membrane distributions depending on cell type and developmental stage.