# Recombinant INX14 protein (His tag)

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| **Catalog Number** | 534720 |
| **Synonyms** | Protein opu-14 |
| **Species** | Caenorhabditis elegans |
| **Expression System** | E. coli |
| **Accession** | O62136 |
| **Gene ID** | 172488 |
| **Molecular Weight** | Predictes a molecular mass of 14.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band. |

## Product Information

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| **Sequence Region** | 127-234 |
| **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 127-234 aa (O62136) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Innexin-14 (Protein opu-14) Fragment (residues 127-234) from Caenorhabditis elegans is a 108-amino acid protein fragment engineered for structural and biochemical studies. This fragment represents a stable, soluble unit of the gap junction protein, ideal for investigating cellular communication mechanisms.<br>Innexin-14 (Protein opu-14), encoded by the inx-14 gene in Caenorhabditis elegans, is a structural component of gap junctions, which are essential for direct intercellular communication. As a multi-pass membrane protein, it localizes to the cell membrane and gap junctions, facilitating the transfer of ions and small molecules between adjacent cells. This role is critical for coordinated cellular activities in development and physiological processes. The provided fragment (residues 127-234) was computationally selected to ensure stability and solubility, enabling detailed analysis of its properties without the complexities of the full-length membrane protein. |