Recombinant INX19 protein (His tag)

Catalog Number	532557
Synonyms	Neuronal symmetry protein 5; Protein opu-19
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O61715
Gene ID	171805
Molecular Weight	Predictes a molecular mass of 17.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	322-454
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 322-454 aa (O61715) 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-19 (322-454) fragment from Caenorhabditis elegans, representing a stable and soluble domain of this essential gap junction protein that coordinates left-right asymmetry in the developing nervous system. This carefully selected fragment is ideal for structural studies and biochemical characterization of neuronal symmetry mechanisms. Innexin-19 (also known as Neuronal symmetry protein 5 or Protein opu-19) is a structural component of gap junctions that specifically coordinates left-right asymmetry in the developing nervous system of C. elegans. The protein forms gap junction networks linking embryonic neurons and provides electrical coupling between cells, which promotes or inhibits AWC signaling. This function is critical for establishing asymmetric patterns of gene expression in left and right AWC olfactory neurons during embryogenesis. Innexin-19 acts autonomously and is localized to the cell membrane as a multi-pass membrane protein, specifically present at transient gap junctions formed between embryonic neuron cell bodies, though it is excluded from axons and dendrites. The full-length protein plays a fundamental role in neuronal development and symmetry establishment.