Recombinant ISL2 protein (His tag)

Catalog Number	549323
Synonyms	Islet-2
Species	Human
Expression System	E. coli
Accession	Q96A47
Molecular Weight	Predictes a molecular mass of 18.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-152
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-152 aa (Q96A47) 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 Human Insulin gene enhancer protein ISL-2 (Islet-2) fragment (residues 1-152) is a high-purity protein designed for studying the structural and functional roles of its LIM zinc-binding domains. This fragment provides researchers with a targeted tool to investigate ISL-2's involvement in motoneuron specification and axon guidance pathways. ISL-2 is a transcriptional factor critical for defining subclasses of motoneurons in the spinal cord, where it facilitates their segregation into columns and guides the selection of distinct axon pathways. This nuclear-localized protein plays a key role in neural development by regulating gene expression patterns that determine motoneuron identity and connectivity. The full-length protein's function in specifying neuronal subtypes makes it an important subject for neurodevelopmental and neurodegenerative research.