Recombinant LIN7C protein (His tag)

Catalog Number	546071
Synonyms	Lin-7C; Mammalian lin-seven protein 3; MALS-3; Vertebrate lin-7 homolog 3; Veli-3
Species	Human
Expression System	E. coli
Accession	Q9NUP9
Molecular Weight	Predictes a molecular mass of 23.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	2-197
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 2-197 aa (Q9NUP9) 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 Lin-7C (2-197) is a high-purity protein fragment encompassing the essential L27 and PDZ domains. This product is engineered to support research on membrane protein trafficking, receptor localization, and synaptic organization in polarized cells, offering a targeted tool for domain-specific functional studies. Lin-7C, encoded by the LIN7C gene in humans, is a key scaffolding protein that establishes and maintains asymmetric distribution of channels and receptors at the plasma membrane in polarized cells. It forms membrane-associated multiprotein complexes with partners like CASK and APBA1, regulating the delivery and recycling of proteins to specific membrane domains. Notably, Lin-7C facilitates the transport of NMDA receptor subunit NR2B via interaction with KIF17, localizes Kir2 channels, GABA transporters, and ERBB family receptors to basolateral membranes in epithelial cells, and contributes to synaptic organization by anchoring GRIN2B at postsynaptic densities. It localizes to the cell membrane, particularly basolateral surfaces, postsynaptic densities, and tight junctions, functioning as a peripheral membrane protein critical for cellular polarization and neuronal signaling.