Recombinant GLDN protein (His tag)

Catalog Number	545250
Species	Human
Expression System	E. coli
Accession	Q6ZMI3
Molecular Weight	Predictes a molecular mass of 30.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	302-551
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 302-551 aa (Q6ZMI3) 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 Gliomedin Fragment (302-551) is a high-purity, soluble protein fragment derived from the GLDN gene, designed for structural and biochemical studies. This 250-amino acid fragment represents a stable region of gliomedin, facilitating research into its role in axonal node formation and sodium channel clustering in myelinated neurons. Gliomedin, encoded by the GLDN gene in Homo sapiens, functions as a ligand for NRCAM and NFASC/neurofascin, playing a critical role in the formation and maintenance of nodes of Ranvier on myelinated axons. It mediates interactions between Schwann cell microvilli and axons, essential for clustering sodium channels that enable saltatory action potential propagation. During development, gliomedin is required for normal sodium channel clustering at heminodes, and together with NRCAM, it maintains NFASC and sodium channel clusters at mature nodes. The full-length protein is a single-pass type II membrane protein localized to the cell membrane and axon projections, particularly at nodes of Ranvier and immature heminodes. Proteolytic cleavage produces a shedded ectodomain that is secreted into the extracellular space and matrix, where it contributes to nodal organization.