Recombinant UNC80 protein (His tag)

Catalog Number	547722
Species	Human
Expression System	E. coli
Accession	Q8N2C7
Molecular Weight	Predictes a molecular mass of 23.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	1173-1365
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 1173-1365 aa (Q8N2C7) 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 UNC80 Protein Fragment (residues 1173-1365) is a highly stable and soluble unit derived from the Protein unc-80 homolog, an essential auxiliary subunit of the NALCN sodium channel complex. This fragment is ideal for structural studies and biochemical assays, offering researchers a reliable tool to investigate neuronal excitability mechanisms. The full-length Protein unc-80 homolog (UNC80) functions as an auxiliary subunit of the NALCN sodium channel complex, a voltage-gated ion channel critical for regulating neuronal excitability through resting sodium permeability. It is activated by neuropeptides such as substance P and neurotensin, as well as extracellular calcium, which modulates the NALCN-dependent sodium-leak current. UNC80 is indispensable for the channel's sensitivity to extracellular calcium, highlighting its key role in maintaining neuronal activity. The protein localizes to the cell membrane as a multi-pass membrane protein, underscoring its integral function in cellular signaling pathways.