Recombinant CLCN6 protein (His tag)

Catalog Number	537810
Synonyms	+; -; Chloride channel protein 6; ClC-6; Chloride transport protein 6
Species	Human
Expression System	E. coli
Accession	P51797
Molecular Weight	Predictes a molecular mass of 16.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	738-869
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 738-869 aa (P51797) 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	Introducing the recombinant protein fragment of H(+)/Cl(-) exchange transporter 6 (ClC-6), encompassing amino acids 738-869. This fragment is expertly designed to include the complete CBS 2 domain, providing researchers with a targeted tool to investigate the specific functional roles of this critical region in chloride-proton exchange and endosomal acidification. The full-length H(+)/Cl(-) exchange transporter 6 (ClC-6), encoded by the CLCN6 gene in Homo sapiens, functions as a voltage-gated channel that mediates the exchange of chloride ions for protons. Operating as an antiporter, it plays a key role in acidifying the lumen of late endosomes, a process essential for intracellular trafficking and degradation. This protein localizes to the late endosome membrane as a multi-pass membrane protein, with its function characterized by conserved gating glutamate residues typical of antiporter family members. The specific fragment (738-869) containing the CBS 2 domain enables focused study of domain-specific contributions to the protein's regulatory and transport mechanisms.