Recombinant ICLN protein (His tag)

Catalog Number	537834
Synonyms	Chloride channel, nucleotide sensitive 1A; Chloride conductance regulatory protein ICln; I(Cln); Chloride ion current inducer protein; ClCI; Reticulocyte pICln
Species	Human
Expression System	E. coli
Accession	P54105
Molecular Weight	Predictes a molecular mass of 23.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	2-195
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 2-195 aa (P54105) 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 Methylosome subunit pICln (CLNS1A) Fragment (aa 2-195) is a high-purity, stable protein fragment designed for structural and biochemical studies. This product captures a soluble and functional unit of the protein, facilitating research into spliceosomal assembly and snRNP biogenesis mechanisms. The full-length Methylosome subunit pICln, encoded by the CLNS1A gene, is a multifunctional protein involved in the assembly of spliceosomal small nuclear ribonucleoproteins (snRNPs) and the methylation of Sm proteins. As a chaperone, it regulates the formation of U1, U2, U4, and U5 snRNPs—key components of the spliceosome—by trapping Sm proteins (SNRPD1, SNRPD2, SNRPE, SNRPF, SNRPG) in an inactive 6S pICln-Sm complex in the cytosol. Dissociation of CLNS1A by the SMN complex enables Sm protein transfer to an SMN-Sm complex, triggering core snRNP assembly and nuclear transport, which is essential for pre-mRNA splicing. The protein localizes primarily to the cytoplasm (cytosol) and nucleus, with a minor fraction associated with the cytoskeleton, underscoring its role in cellular RNA processing pathways.