Recombinant CA2D1 protein (His tag)

Catalog Number	537836
Synonyms	Voltage-gated calcium channel subunit alpha-2/delta-1
Species	Human
Expression System	E. coli
Accession	P54289
Molecular Weight	Predictes a molecular mass of 14.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	957-1073
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 957-1073 aa (P54289) 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	This recombinant protein is a fragment of the human Voltage-dependent calcium channel subunit alpha-2/delta-1 (CACNA2D1), encompassing residues 957-1073. It is designed as a stable and soluble unit ideal for structural studies and biochemical assays, aiding research into calcium channel regulation and function. The full-length Voltage-dependent calcium channel subunit alpha-2/delta-1 regulates calcium current density and the activation/inactivation kinetics of voltage-dependent calcium channels, playing a critical role in processes such as excitation-contraction coupling. It is localized to the cell membrane as a single-pass type I membrane protein, where it modulates calcium signaling essential for various physiological functions.