Recombinant PLEC protein (His tag)

Catalog Number	547335
Synonyms	PCN; PLTN; Hemidesmosomal protein 1; HD1; Plectin-1
Species	Human
Expression System	E. coli
Accession	Q15149
Molecular Weight	Predictes a molecular mass of 54.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 60 kDa band.

Product Information

Sequence Region	176-629
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 176-629 aa (Q15149) 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 Human Plectin (PCN) Fragment (aa 176-629), a high-purity protein designed for studying the critical roles of plectin in cytoskeletal organization. This fragment includes the complete Calponin-homology (CH) 1 and CH 2 domains, making it an ideal tool for investigating domain-specific functions in intermediate filament anchoring and cellular structure maintenance. Plectin, encoded by the PLEC gene in Homo sapiens, is a versatile cytoskeletal linker protein that interconnects intermediate filaments with microtubules and microfilaments. It plays a key role in anchoring these filaments to cellular structures such as hemidesmosomes and desmosomes, contributing to mechanical stability and regulatory dynamics in cells. In muscle tissue, plectin binds actin to membrane complexes and is essential for maintaining myofiber integrity. The protein localizes to the cytoplasm, cytoskeleton, hemidesmosomes, and podosomes, highlighting its involvement in structural support and cellular junctions.