Recombinant PGCA protein (His tag)

Catalog Number	537559
Synonyms	Cartilage-specific proteoglycan core protein; CSPCP; Chondroitin sulfate proteoglycan core protein 1; Chondroitin sulfate proteoglycan 1
Species	Human
Expression System	E. coli
Accession	P16112
Molecular Weight	Predictes a molecular mass of 38.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	17-351
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 17-351 aa (P16112) 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 Aggrecan Core Protein Fragment (residues 17-351) is a high-purity protein designed for research on cartilage-specific proteoglycan functions. This fragment includes the essential Ig-like V-type, Link 1, and Link 2 domains, making it an ideal tool for studying extracellular matrix interactions and compression resistance mechanisms in cartilaginous tissues. The full-length Aggrecan core protein is a major component of the extracellular matrix in cartilaginous tissues, where it plays a critical role in resisting compression. It functions by binding avidly to hyaluronic acid through its N-terminal globular region, contributing to the structural integrity and resilience of cartilage. As a secreted protein located in the extracellular space and matrix, Aggrecan is vital for maintaining tissue function and has significant implications in cartilage biology and related disorders.