Recombinant COLA1 protein (His tag)

Catalog Number	548024
Synonyms	XXI
Species	Human
Expression System	E. coli
Accession	Q96P44
Molecular Weight	Predictes a molecular mass of 46.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	23-422
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 23-422 aa (Q96P44) 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 Collagen alpha-1(XXI) chain (COL21A1) fragment (aa 23-422) is a high-purity protein designed to encompass the VWFA and Laminin G-like functional domains. This fragment serves as an essential tool for investigating domain-specific interactions and mechanisms in extracellular matrix and vascular biology. The full-length Collagen alpha-1(XXI) chain, encoded by the COL21A1 gene, is localized to both the secreted extracellular space—particularly within the extracellular matrix of blood vessel walls—and the cytoplasm, as observed in cultured human aortic smooth muscle cells. This dual localization suggests roles in structural support and cellular processes, with implications for vascular function and tissue integrity. The protein's presence in key extracellular and cytoplasmic compartments highlights its potential importance in cardiovascular and connective tissue research.