Recombinant COEA1 protein (His tag)

Catalog Number	544848
Synonyms	XIV; Undulin
Species	Human
Expression System	E. coli
Accession	Q05707
Molecular Weight	Predictes a molecular mass of 11.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	31-121
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 31-121 aa (Q05707) 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 product is a recombinant fragment of the human Collagen alpha-1(XIV) chain (Undulin), spanning residues 31-121. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating the adhesive properties and molecular interactions of this key extracellular matrix protein. The full-length Collagen alpha-1(XIV) chain, encoded by the COL14A1 gene, plays an adhesive role by integrating collagen bundles in the extracellular matrix. It is thought to associate with the surface of interstitial collagen fibrils via its COL1 domain, while the COL2 domain acts as a rigid arm that positions the large N-terminal globular domain into the extracellular space. This configuration enables potential interactions with other matrix components or cell surface receptors, contributing to tissue organization and stability. The protein is secreted and localized to the extracellular matrix, where it supports structural integrity and cell-matrix communication.