Recombinant CO8A2 protein (His tag)

Catalog Number	542220
Synonyms	VIII; Endothelial collagen
Species	Human
Expression System	E. coli
Accession	P25067
Molecular Weight	Predictes a molecular mass of 15.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	574-703
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 574-703 aa (P25067) 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-2(VIII) chain (Endothelial collagen) fragment (residues 574-703) is a high-purity, soluble protein designed for structural and biochemical studies. This 130-amino acid fragment, derived from the COL8A2 gene, represents a stable and functionally relevant region ideal for investigating endothelial basement membrane dynamics and vascular integrity. The full-length Collagen alpha-2(VIII) chain is a key macromolecular component of subendothelial tissues, prominently found in the Descemet's membrane of corneal endothelial cells and blood vessel endothelia. It plays a critical role in maintaining vascular wall structure and integrity by supporting the migration and proliferation of vascular smooth muscle cells, with implications in processes such as atherogenesis. As a secreted protein localized to the extracellular matrix and basement membrane, it contributes to the structural framework essential for endothelial function and tissue organization.