Recombinant COFA1 protein (His tag)

Catalog Number	544592
Synonyms	XV; Endostatin-XV; Related to endostatin; Restin-I; Restin-II; Restin-III; Restin-IV
Species	Human
Expression System	E. coli
Accession	P39059
Molecular Weight	Predictes a molecular mass of 21.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1215-1388
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1215-1388 aa (P39059) 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 recombinant protein product features a stable and soluble fragment (residues 1215-1388) of the human Collagen alpha-1(XV) chain, specifically encompassing the Restin (Endostatin-XV) domain. Engineered for structural and biochemical studies, this fragment retains key functional properties related to angiogenesis inhibition and microvascular stabilization, offering researchers a reliable tool for investigating extracellular matrix biology and therapeutic applications. The full-length Collagen alpha-1(XV) chain, encoded by the COL15A1 gene in Homo sapiens, is a structural protein critical for stabilizing microvessels and muscle cells in cardiac and skeletal tissues. It localizes to the secreted extracellular space and matrix, where it contributes to tissue integrity. Notably, its cleaved product, Restin (Endostatin-XV), functions as a potent inhibitor of angiogenesis, highlighting its significance in vascular biology and potential roles in regulating blood vessel formation in physiological and pathological contexts.