Recombinant TIMP2 protein (His tag)

Catalog Number	542147
Synonyms	CSC-21K; Tissue inhibitor of metalloproteinases 2; TIMP-2
Species	Human
Expression System	E. coli
Accession	P16035
Molecular Weight	Predictes a molecular mass of 23.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	27-220
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 27-220 aa (P16035) 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 TIMP-2 (Metalloproteinase inhibitor 2) fragment (residues 27-220) is a high-purity protein designed to encompass the complete NTR functional domain. This product serves as an essential tool for investigating metalloproteinase inhibition, matrix remodeling, and related cellular processes in a domain-specific context. TIMP-2 (Tissue inhibitor of metalloproteinases 2) is a secreted protein that forms irreversible complexes with numerous metalloproteinases—including MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-13, MMP-14, MMP-15, MMP-16, and MMP-19—by binding to their catalytic zinc cofactor, thereby inactivating them. As a key regulator of extracellular matrix degradation and tissue remodeling, TIMP-2 plays a critical role in physiological and pathological processes such as wound healing, angiogenesis, and cancer progression. The provided recombinant fragment spans residues 27-220, covering the NTR domain, which is central to its inhibitory function, making it suitable for domain-focused mechanistic and functional studies.