Recombinant TIMP4 protein (His tag)

Catalog Number	549893
Synonyms	Tissue inhibitor of metalloproteinases 4; TIMP-4
Species	Human
Expression System	E. coli
Accession	Q99727
Molecular Weight	Predictes a molecular mass of 24.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	30-224
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 30-224 aa (Q99727) 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-4 (Metalloproteinase inhibitor 4) fragment (residues 30-224) is a high-purity protein designed to encompass the full NTR domain, enabling targeted studies of metalloproteinase inhibition and extracellular matrix regulation. TIMP-4 (Tissue inhibitor of metalloproteinases 4) is a secreted protein that forms complexes with metalloproteinases—including MMP-1, MMP-2, MMP-3, MMP-7, and MMP-9—and irreversibly inactivates them by binding to their catalytic zinc cofactor. As a key regulator of extracellular matrix degradation, TIMP-4 plays a critical role in tissue remodeling, inflammation, and disease processes such as cancer and fibrosis. Its secretion into the extracellular space underscores its importance in modulating protease activity in physiological and pathological contexts.