

Active Recombinant Human TIMP4 protein, His-tagged

Cat. No. TIMP4-549H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human TIMP4 protein(Q99727)(32~224 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	32-224 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Tissue Inhibitors Of Metalloproteinase 4 (TIMP4) is an enzyme that in humans is encoded by the TIMP4 gene. This gene belongs to the tissue inhibitor of metalloproteinases gene family. The proteins encoded by this gene family are inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. The secreted, netrin domain-containing protein encoded by this gene is involved in regulation of platelet aggregation and recruitment and may play role in hormonal regulation and endometrial tissue remodeling. Besides, Matrix Metalloproteinase 2 (MMP2) has been identified as an interactor of TIMP4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human TIMP4 and recombinant human MMP2. Briefly, TIMP4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to MMP2-coated microtiter wells and incubated for 2h at 37°C. Wells

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were washed with PBST and incubated for 1h with anti-TIMP4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of TIMP4 and MMP2 was shown, and this effect was in a dose dependent manner.

Molecular Mass	23.5kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	TIMP4 TIMP metalloproteinase inhibitor 4 [Homo sapiens]
Official Symbol	TIMP4
Synonyms	TIMP4; TIMP metalloproteinase inhibitor 4; tissue inhibitor of metalloproteinase 4; metalloproteinase inhibitor 4; TIMP-4; tissue inhibitor of metalloproteinases 4;
Gene ID	7079
mRNA Refseq	NM_003256

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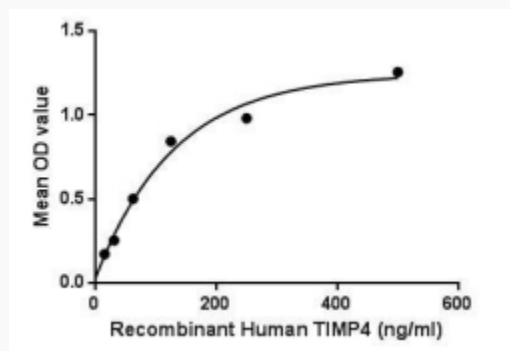
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Protein Refseq NP_003247

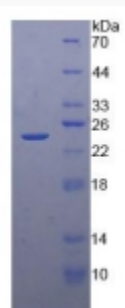
MIM 601915

UniProt ID Q99727

Activity



SDS-PAGE



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