

Human TIMP4 protein, His tag

Cat. No. GTX00229-pro

| Applications | Functional Assay | Package 10 μg |
|--------------|------------------|------------------|
| Species | Human | 13 |

Applications

Application Note

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 100 μ l were then transferred to MMP2-coated microtiter wells and incubated for 2h at 37°C. Wells 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 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of TIMP4 and MMP2 was in a dose dependent manner.

Observed MW (kDa) 24 kDa.

| Properties | | |
|-------------------|--|--|
| Form | Lyophilized powder | |
| Buffer | Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose. | |
| Preservative | ProClin 300 | |
| Storage | For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles. | |
| Region/Sequence | N-terminal His-Tag; Cys32~Pro224 (NP_003247.1) | |
| Expression System | E. coli | |
| Purity | > 90% | |
| Endotoxin | < 1 EU/µg | |
| Conjugation | Unconjugated | |
| Note | For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. | |



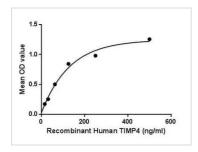
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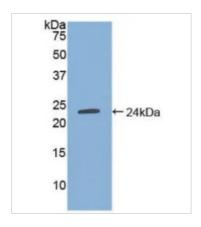


DATA IMAGES



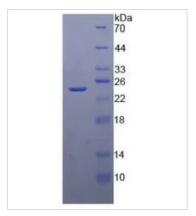
GTX00229-pro Functional Assay Image

Functional ELISA analysis of GTX00229-pro Human TIMP4 protein which can bind immobilized MMP2 protein.



GTX00229-pro Image

WB analysis of GTX00229-pro Human TIMP4 protein.



GTX00229-pro Image

SDS-PAGE analysis of GTX00229-pro Human TIMP4 protein.



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