

Active Recombinant Mouse Timp3 protein, His-tagged

Cat. No. Timp3-546M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse Timp3 protein(P39876)(20~211 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	20-211 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 3 (TIMP3) is an protein belongs to the tissue inhibitor of metalloproteinases family. They are inhibitors of the matrix metalloproteinases. TIMP-3 is the only member of the TIMP family which is found exclusively in the extracellular matrix (ECM). It is regulated in a cell cycle-dependent fashion in certain cell types and may serve as a marker for terminal differentiation. The activity of recombinant mouse TIMP3 was measured by its ability to inhibit rhMMP2 cleavage of a fluorogenic peptide substrate MCA-Pro-Leu-Gly-Leu-DPA-Ala-Arg-NH₂ in the assay buffer 50 mM Tris, 10 mM CaCl₂, 150 mM NaCl, 0.05% (w/v) Brij-35, pH 7.5. rhMMP2 was diluted to 100 ug/ml and activated with 1 mM APMA at 37°C for 1 hour and rmTIMP3 (MW: 23.25 KD) was diluted to different concentrations with the assay buffer. Mix 8 μl of rmTIMP3 curve dilutions, 12.8 μl of activated rhMMP-2, and 59.2 μl of assay buffer, including a control containing assay buffer and the diluted rhMMP-2 and incubate the react

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ions for 2 hours at 37°C. Loading 50 µl of the incubated mixtures which were diluted five-fold in assay buffer into empty wells of a plate, and start the reaction by adding 50 µl of 20 µM substrate. Include a substrate blank containing 50 µl of assay buffer and 50 µl of 20 µM substrate. Then read at excitation and emission wavelengths of 320 nm and 405 nm, respectively, in kinetic mode for 5 minutes. The result was shown and it was obvious that recombinant mouse TIMP3 significantly decreased rhMMP2 activity. The inhibition IC₅₀ was <26 nM.

Molecular Mass	23.3kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 97% 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	Timp3 tissue inhibitor of metalloproteinase 3 [Mus musculus]
Official Symbol	Timp3
Synonyms	TIMP3; tissue inhibitor of metalloproteinase 3; metalloproteinase inhibitor 3; tissue inhibitor of metalloproteinases 3; Timp-3;
Gene ID	21859

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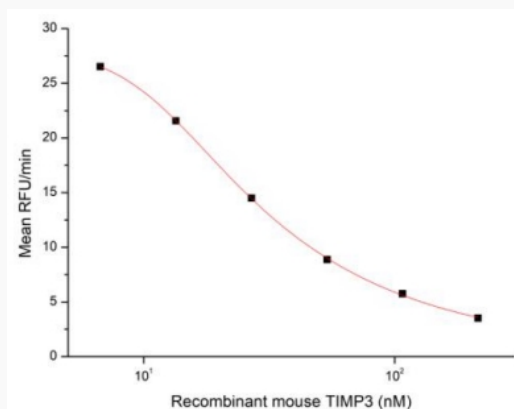
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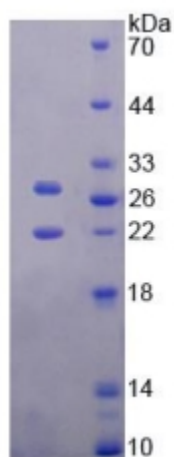
mRNA Refseq NM_011595

Protein Refseq NP_035725

Activity



SDS-PAGE



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