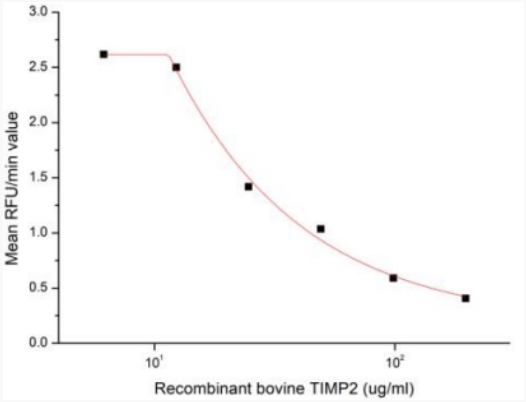
Active Recombinant Bovine TIMP2 protein, His-tagged

Cat. No. TIMP2-5334B **Lot. No.** (See product label)

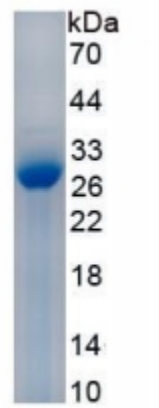
SPECIFICATION

Product Overview	Active Recombinant Bovine TIMP2 protein(P16368)(27~220 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Bovine
Source	E.coli
ProteinLength	27-220 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Tissue inhibitors of metalloproteinases or TIMPs are a family of proteins that regulate the activation and proteolytic activity of the zinc enzymes known as matrix metalloproteinases (MMPs). There are four members of the family, TIMP-1, TIMP-2, TIMP-3, and TIMP-4. TIMP-2 is a non N-glycosylated protein with a molecular mass of 22 kDa produced by a wide range of cell types, which inhibits MMPs non-covalently by the formation of binary complexes. TIMP-2 also has erythroid potentiating and cell growth promoting activities. The activity of recombinant bovine TIMP2 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 rbTIMP2 (MW: 51.75 KD) was diluted to different concentrations with the assay buffer. Mix 8 µof rhTIMP2 curve dilutions, 12.8 µof activated rb

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	MMP-2, and 59.2 μof assay buffer, including a control containing assay buffer and the diluted rhMMP-2 and incubate the reactions for 2 hours at 37°C. Loading 50 μof the in cubated mixtures which were diluted five-fold in assay buffer into empty wells of a plat e, and start the reaction by adding 50 μof 20 μM substrate. Include a substrate blank c ontaining 50 μof assay buffer and 50 μof 20 μM substrate. Then read at excitiation and emission wavelengths of 320 nm and 405 nm, respectively, in kinetic mode for 5 minu tes. The result was shown and it was obvious that recombinant bovine TIMP2 signific antly decreased rhMMP2 activity. The inhibition IC50 was <30 nM.
Molecular Mass	25.4kDa
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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Activity	

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SDS-PAGE	

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