abcam

Product datasheet

Recombinant human TIMP1 protein ab82104

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Description

Product name Recombinant human TIMP1 protein

Biological activity Biological Activity: TIMP1 activity was measured by its ability to inhibit human MMP1 induced

hydrolysis of a chromogenic peptide substrate at room temperature. Half maximal inhibition was

obtained at a TIMP1 concentration of approximately 0.5 µg/ml, when using an MMP1

concentration of 1.6 µg/ml.

Purity > 95 % SDS-PAGE.

Purity is greater than 95% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than

0.1 ng per μg (1EU/μg).

Expression system Escherichia coli

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence CTCVPPHPQT AFCNSDLVIR AKFVGTPEVN QTTLYQRYEI

KMTKMYKGFQ ALGDAADIRF VYTPAMESVC

GYFHRSHNRS EEFLIAGKLQ DGLLHITTCS FVAPWNSLSL

AQRRGFTKTY TVGCEECTVF PCLSIPCKLQ SGTHCLWTDQ LLQGSEKGFQ SRHLACLPRE

PGLCTWQSLR SQIA

Specifications

Our **Abpromise guarantee** covers the use of **ab82104** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Functional Studies

SDS-PAGE

Western blot

Form Lyophilized

Additional notes Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do

not vortex (can be stored at 4C for up to 1 week).

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein

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Preparation and Storage

Stability and Storage

Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Please see notes section.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex (can be stored at 4C for up to 1 week). For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20C to -80C.

General Info

Function

Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Also mediates erythropoiesis in vitro; but, unlike IL-3, it is species-specific, stimulating the growth and differentiation of only human and murine erythroid progenitors. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-11, MMP-12, MMP-13 and MMP-16. Does not act on MMP-14.

Sequence similarities

Belongs to the protease inhibitor I35 (TIMP) family.

Contains 1 NTR domain.

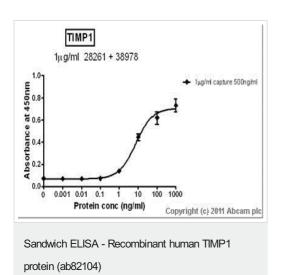
Post-translational modifications

The activity of TIMP1 is dependent on the presence of disulfide bonds.

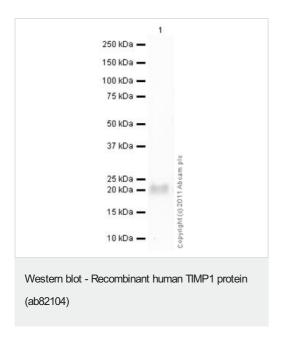
Cellular localization

Secreted.

Images



Standard curve for TIMP1 (Analyte: ab82104); dilution range 1pg/ml to 1 μ g/ml using Capture Antibody Mouse monoclonal [2E7.1] to TIMP1 (ab28261) at 1 μ g/ml and Detector Antibody Rabbit polyclonal to TIMP1 - Carboxyterminal end (ab38978) at 0.5 μ g/ml.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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