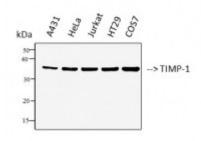


Anti-TIMP-1 antibody



Western Blot (WB) analysis of 1)A431, 2)HeLa, 3)Jurkat, 4)HT29, 5)COS7 cell lysates using TIMP-1 antibody (STJ96023).



Description TIMP-1 is a protein encoded by the TIMP-1 gene which is approximately

23,2 kDa. TIMP-1 is involved in the GPCR pathway, phospholipase-C pathway, apoptotic pathways in synovial fibroblasts, ERK signalling and the CREB pathway. It functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signalling cascades via CD63 and ITGB1, it also acts as an inhibitor of MMPs which are groups of peptides involved in extracellular matrix degradation. TIMP-1 is secreted and is only active in the presence of disulphide bonds. It is ubiquitously expressed in numerous cells and tissues of the body. Mutations in the TIMP-1 gene may result in chronic venous leg ulcers and oral submucous fibrosis. STJ96023 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of TIMP-1 protein.

Model STJ96023

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Immunogen Synthesized peptide derived from human TIMP-1

Immunogen Region 30-110 aa, Internal

Gene ID 7076

Gene Symbol TIMP1

Dilution range WB 1:500-1:2000ELISA 1:10000

Specificity TIMP-1 Polyclonal Antibody detects endogenous levels of TIMP-1 protein.

Tissue Specificity Detected in rheumatoid synovial fluid (at protein level).

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Metalloproteinase inhibitor 1 Erythroid-potentiating activity EPA Fibroblast

collagenase inhibitor Collagenase inhibitor Tissue inhibitor of

metalloproteinases 1 TIMP-1

Molecular Weight 24 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:11820OMIM:305370</u>

Alternative Names Metalloproteinase inhibitor 1 Erythroid-potentiating activity EPA Fibroblast

collagenase inhibitor Collagenase inhibitor Tissue inhibitor of

metalloproteinases 1 TIMP-1

Function Metalloproteinase inhibitor that functions by forming one to one complexes

with target metalloproteinases, such as collagenases, and irreversibly inactivates them by binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14. Also functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling. Mediates erythropoiesis in vitro; but, unlike IL3, it is species-specific,

stimulating the growth and differentiation of only human and murine erythroid

progenitors.

Cellular Localization Secreted

Post-translational The activity of TIMP1 is dependent on the presence of disulfide bonds. N-

Modifications glycosylated.

St John's Laboratory Ltd

F +44 (0)207 681 2580

W http://www.stjohnslabs.com/ E info@stjohnslabs.com

T+44 (0)208 223 3081