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Rabbit Anti-TIMP-2 antibody

SL0416R

Product Name:	TIMP-2
Chinese Name:	金属蛋白酶组织抑制因子-2抗体
Alias:	Metalloproteinase inhibitor 2 precursor; Tissue inhibitor of metalloproteinases 2; Collagenase inhibitor; CSC 21K; CSC21K; TIMP2; TIMP 2; TIMP 2; TIMP metallopeptidase inhibitor 2; TIMP2_HUMAN; Metalloproteinase inhibitor 2; CSC-21K; TIMP-2.
文献引用 PubMed :	**Specific References(6)**|SL0416R has been referenced in 6 publications. **[IF=1.91]**Fang, Ming, Xin-Chi Wu, and Wenlong Huang. "Raloxifene Upregulated Mesangial Cell MMP-2 Activity via ER-?? Through Transcriptional Regulation."Cell Biochemistry and Biophysics (2013): 1-7..**WB;Mouse**. PubMed:23471663 **[IF=3.53]**Lu HY, Huang CY, Shih CM, Chang WH, Tsai CS, et al. (2015) Dipeptidyl Peptidase-4 Inhibitor Decreases Abdominal Aortic Aneurysm Formation through GLP-1-Dependent Monocytic Activity in Mice. PLoS ONE 10(4): e0121077.**IHC-P;Mouse**. PubMed:25876091 **[IF=3.31]**Watts, Ryan P., et al. "Novel 24-h ovine model of brain death to study the profile of the endothelin axis during cardiopulmonary injury." Intensive Care Medicine Experimental 3.1 (2015): 31.**IHC-P;** PubMed:26596583 **[IF=2.53]**Ni, Wei-Jian, et al. "Renoprotective effects of berberine through regulation of the MMPs/TIMPs system in streptozocin-induced diabetic nephropathy in rats." European journal of pharmacology 764 (2015): 448-456.**WB, IHC-P;Rat**. PubMed:26192633

	[IF=2.92]He, Qiaowei, et al. "Single minded 2-s (SIM2-s) gene is expressed in human GBM cells and involved in GBM invasion." Cancer Biology & Therapy 9.6 (2010): 430-436.**WB;Human**. PubMed:20448453 [IF=3.14]Varghese, Sheeja, et al. "The inhibitory effect of anti-tumor polysaccharide from Punica granatum on metastasis." International Journal of Biological Macromolecules (2017).**WB;Human**. PubMed:28552725
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TIMP-2:131-220/220
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene is a member of the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. In addition to an inhibitory role against metalloproteinases, the encoded protein has a unique role among TIMP family members in its ability to directly suppress the proliferation of endothelial cells. As a result, the encoded protein may be critical to the maintenance of tissue homeostasis by suppressing the proliferation of quiescent tissues in response to angiogenic factors, and by inhibiting protease activity in tissues undergoing remodelling of the extracellular matrix. [provided by RefSeq, Jul 2008]. **Function:** Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-13, MMP-14, MMP-15, MMP-16

and MMP-19.

Subunit:
Interacts (via the C-terminal) with MMP2 (via the C-terminal PEX domain); the interaction inhibits the MMP2 activity.

Subcellular Location:
Secreted.

Post-translational modifications:
The activity of TIMP2 is dependent on the presence of disulfide bonds.

Similarity:
Belongs to the protease inhibitor I35 (TIMP) family.
Contains 1 NTR domain.

SWISS:
P16035

Gene ID:
7077

Database links:

Entrez Gene: 282093Cow

Entrez Gene: 100135629Guinea pig

Entrez Gene: 7077Human

Entrez Gene: 21858Mouse

Entrez Gene: 100008689Rabbit

Entrez Gene: 29543Rat

Omim: 188825Human

SwissProt: P16368Cow

SwissProt: Q9WUC6Guinea pig

SwissProt: P16035Human

SwissProt: P25785Mouse

SwissProt: Q9TRZ7Rabbit

SwissProt: P30121Rat

Unigene: 633514Human

Unigene: 206505Mouse

	Unigene: 10161Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. Synthesis and Degradation（Synthesis and Degradation） TIMP-2与TIMP-1一样是基质金属蛋白酶的抑制酶，其功能与MMP相反，能抑制Tumour细胞的浸润和转移，主要用于各种恶性Tumour如乳腺癌等的研究。TIMP-2又称为CSC-21K，是一种21-24kDa的glycoprotein，在多种组织细胞中表达，它可以和MMPs家族成员以共价键方式形成复合物，从而发挥其抑制作用。在正常生理条件下，MMPs和TIMPs之间的平衡状态是维持Extracellular matrix正常状态所必需的，一旦它们之间的比例失调，就会造成一系列的病理状态。