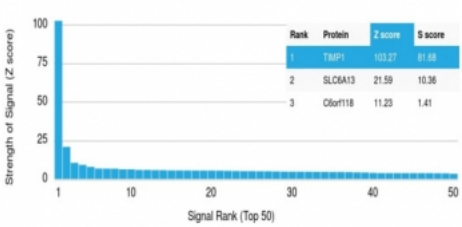
Tissue Inhibitor of Metalloproteinase 1 Antibody / TIMP1 [clone TIMP1/4358] (V5330)

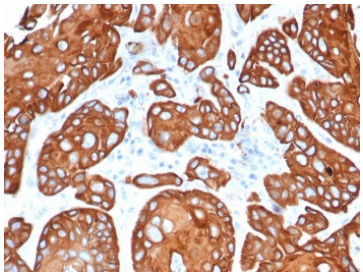
Catalog No.	Formulation	Size
V5330-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5330-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5330SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

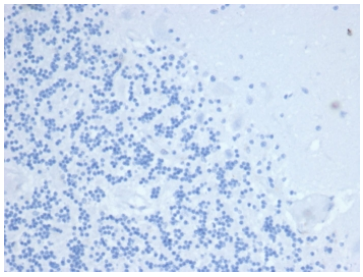
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TIMP1/4358
Purity	Protein A affinity
UniProt	P01033
Localization	Cytoplasm, Secreted
Applications	ELISA : 2-4mg/ml for coating (order BSA-free format) Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Tissue Inhibitor of Metalloproteinase 1 antibody is available for research use only.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Tissue Inhibitor of Metalloproteinase 1 antibody (clone TIMP1/4358). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.



IHC staining of FFPE human esophageal cancer tissue with Tissue Inhibitor of Metalloproteinase 1 antibody (clone TIMP1/4358). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Negative control: IHC testing of FFPE human brain tissue with Tissue Inhibitor of Metalloproteinase 1 antibody (clone TIMP1/4358) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

TIMP-1, TIMP-2, TIMP-3 and TIMP-4 (for tissue inhibitor of metalloproteinases -1, -2, -3 and -4) complex with metalloproteinases such as collagenases, gelatinases and stromelysins, resulting in irreversible inactivation of the metalloproteinase. TIMP-1 is identical to EPA (erythroid-potentiation activity). PTH has been shown to be a regulator of TIMP-2 in osteoblastic cells. TIMP-3 may be involved in regulating trophoblastic invasion of the uterus as well as in regulating remodeling of the extracellular matrix during the folding of epithelia, and in the formation, branching and expansion of epithelial tubes. TIMP-4 is most highly expressed in heart tissues. Studies have demonstrated that TIMP1 is useful as a biomarker for early detection of colorectal cancer, outperforming CEA. Additionally, TIMP1 studies have demonstrated its role in CRC tumorigenesis, as well as observing its overexpression in metastatic lymph nodes.

Application Notes

Optimal dilution of the Tissue Inhibitor of Metalloproteinase 1 antibody should be determined by the researcher.

Immunogen

A recombinant human protein fragment (within amino acids 1-200) was used as the immunogen for the Tissue Inhibitor of Metalloproteinase 1 antibody.

Storage

Aliquot the Tissue Inhibitor of Metalloproteinase 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.