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MMP15 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6199a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P51511
Other Accession	NP_002419
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2029
Calculated MW	75807
Antigen Region	165-194

Additional Information

Gene ID	4324
Other Names	Matrix metalloproteinase-15, MMP-15, 3424-, Membrane-type matrix metalloproteinase 2, MT-MMP 2, MTMMP2, Membrane-type-2 matrix metalloproteinase, MT2-MMP, MT2MMP, SMCP-2, MMP15
Target/Specificity	This MMP15 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-194 amino acids from the N-terminal region of human MMP15.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MMP15 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMP15
Function	Endopeptidase that degrades various components of the extracellular

	matrix. May activate progelatinase A.
Cellular Location	Membrane; Single-pass type I membrane protein; Extracellular side
Tissue Location	Appeared to be synthesized preferentially in liver, placenta, testis, colon and intestine. Substantial amounts are also detected in pancreas, kidney, lung, heart and skeletal muscle

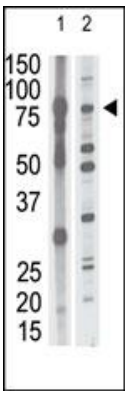
Background

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, MMP15 is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted.

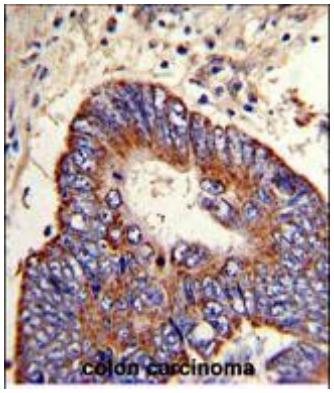
References

Jung, M., et al., Prostate 55(2):89-98 (2003).
Nagase, H., et al., J. Biol. Chem. 274(31):21491-21494 (1999).
d'Ortho, M.P., et al., Eur. J. Biochem. 250(3):751-757 (1997).
Sato, H., et al., Genomics 39(3):412-413 (1997).
Mattei, M.G., et al., Genomics 40(1):168-169 (1997).

Images

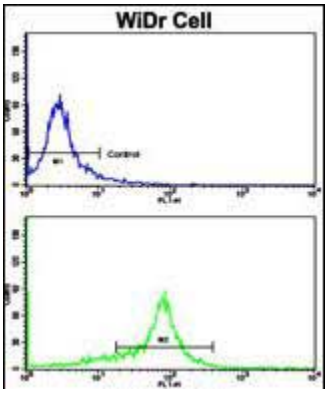


The anti-MMP15 N-term Antibody (Cat.#AP6199a) is used in Western blot to detect MMP15 in mouse brain tissue lysate (lane 1) and HL60 cell lysate (lane 2) lysate.



Formalin-fixed and paraffin-embedded human colon carcinoma with MMP15 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of WiDr cells using MMP15 Antibody (N-term)(bottom histogram) compared to a



negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.