

MMP24 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6205a

Specification

MMP24 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>O9Y5R2</u> <u>O99PW6, O9R0S2, NP_006681</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 73231 396-425

MMP24 Antibody (Center) - Additional Information

Gene ID 10893

Other Names

Matrix metalloproteinase-24, MMP-24, 3424-, Membrane-type matrix metalloproteinase 5, MT-MMP 5, MTMMP5, Membrane-type-5 matrix metalloproteinase, MT5-MMP, MT5MMP, Processed matrix metalloproteinase-24, MMP24, MT5MMP

Target/Specificity

This MMP24 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 396-425 amino acids from the Central region of human MMP24.

Dilution IHC-P~~1:50~100 WB~~1:1000 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

MMP24 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MMP24 Antibody (Center) - Protein Information



Name MMP24

Synonyms MT5MMP

Function Metalloprotease that mediates cleavage of N-cadherin (CDH2) and acts as a regulator of neuro-immune interactions and neural stem cell quiescence. Involved in cell-cell interactions between nociceptive neurites and mast cells, possibly by mediating cleavage of CDH2, thereby acting as a mediator of peripheral thermal nociception and inflammatory hyperalgesia. Key regulator of neural stem cells quiescence by mediating cleavage of CDH2, affecting CDH2-mediated anchorage of neural stem cells to ependymocytes in the adult subependymal zone, leading to modulate their quiescence. May play a role in axonal growth. Able to activate progelatinase A. May also be a proteoglycanase involved in degradation of proteoglycans, such as dermatan sulfate and chondroitin sulfate proteoglycans. Cleaves partially fibronectin, but not collagen type I, nor laminin (By similarity).

Cellular Location

[Matrix metalloproteinase-24]: Cell membrane; Single-pass type I membrane protein. Golgi apparatus, trans-Golgi network membrane; Single-pass type I membrane protein. Note=Recycled back to the plasma membrane through the trans-Golgi network via interaction with APBA3

Tissue Location

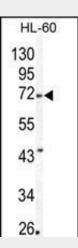
Predominantly expressed in brain, kidney, pancreas and lung. Overexpressed in a series of brain tumors, including astrocytomas and glioblastomas.

MMP24 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

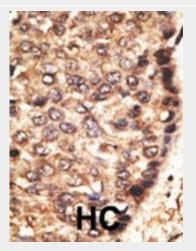
MMP24 Antibody (Center) - Images



Western blot analysis of MMP24 Antibody (Center) (Cat.#AP6205a) in HL60 cell line lysates



(35ug/lane). MMP24 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

MMP24 Antibody (Center) - 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, MMP24 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. This protein activates MMP2 by cleavage. The gene has previously been referred to as MMP25 but has been renamed matrix metalloproteinase 24 (MMP24).

MMP24 Antibody (Center) - References

Jung, M., et al., Prostate 55(2):89-98 (2003). Kajita, M., et al., FEBS Lett. 457(3):353-356 (1999). Llano, E., et al., Cancer Res. 59(11):2570-2576 (1999). Nagase, H., et al., J. Biol. Chem. 274(31):21491-21494 (1999). Kinoh, H., et al., Cytogenet. Cell Genet. 87 (1-2), 97-98 (1999).