

MMP24 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6205a

Specification

MMP24 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Other Accession

<u>Q9Y5R2</u> <u>NP_006681</u>

MMP24 Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP6205a was selected from the Center region of human MMP24 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MMP24 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

MMP24 Antibody (Center) Blocking Peptide - Images

MMP24 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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).