

Product Information Sheet



Polyclonal Anti-MMP2

Catalogue No. PA1122

Lot No. 08G01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat, mouse. No cross reactivity with other proteins.

Recommended application Western blot Immunohistochemistry(P) Immunohistochemistry(F) Immunocytochemistry



Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human MMP2, identical to the related rat sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1μ g/ml with the appropriate system to detect MMP2 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect MMP2 in formalin fixed and paraffin embedded tissues.

Immunohistochemistry(F)

At 1-2 μ g/ml to detect MMP2 in formalin or acetone fixed tissues.

Immunocytochemistry

At 1-2µg/ml to detect MMP2 in acetone fixed cell. Antigen retrieval by Pepsin and Trypsin is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

To reorder contact us at: Contents

Antagene, Inc.Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na $_2$ HPO $_4$, 0.05mgToll Free: 1(866)964-2589Thimerosal, 0.05mg NaN $_3$.

email: Info@antageneinc.com

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Product Information Sheet



Polyclonal Anti-Catenin γ

Catalogue No. PA1117

Lot No. 08G01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat. No cross reactivity with other proteins.

Recommended application Western blot Immunohistochemistry(P) Immunocytochemistry



Immunogen

Immunogen affinity purified.

Puritv

A synthetic peptide corresponding to a sequence at the N-terminal of human Catenin γ , identical to the related mouse and rat sequence.

Application Western blot At 1µg/ml with the appropriate system to detect Catenin γ in cells and tissues. *Immunohistochemistry(P)* At 1-2 μ g/ml to detect Catenin γ in formalin fixed and paraffin embedded tissues. Boiling the sections is required. *Immunocytochemistry* Suitable Other applications have not been tested. Optimal dilutions should be determined by end user. Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃. Reconstitution 0.2ml of distilled water will yield a concentration of 500µg/ml. To reorder contact us at: Storage

Antagene, Inc. Toll Free: 1(866)964-2589 email: Info@antageneinc.com

At -20°C for one year. After reconstitution, at 4°C for one month. It can
also be aliquotted and stored frozen at -20°C for longer time.
supported by SA1022 in IH and IC.

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BACKGROUND

Cateniny, also known as junction plakoglobin (JUN) or plakoglobin (PKGB). Plakoglobin is a major cytoplasmic protein which is the only known constituent common to submembranous plaques of both desmosomes and intermediate junctions. Catenin β and catenin γ (plakoglobin), vertebrate homologs of Drosophila armadillo, function in cell adhesion and the Wnt signaling pathway. Catenin γ may have distinct roles in Wnt signaling and cancer via differential effects on downstream target genes.

REFERENCE

1. Kolligs, F. T.; Kolligs, B.; Hajra, K. M.; Hu, G.; Tani, M.; Cho, K. R.; Fearon, E. R. : Gamma-catenin is regulated by the APC tumor suppressor and its oncogenic activity is distinct from that of beta-catenin. *Genes Dev.* 14: 1319-1331, 2000.

Reconstitution

Storage

0.2ml of distilled water will yield At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

Matrix metalloproteinase-2 (MMP2) is a Type IV collagenase, 72-kD, which is also known as gelatinase¹ and is a member of a group of secreted zinc metalloproteases². The MMP2 gene is 17 kb long with 13 exons varying in size from 110 to 901 bp and 12 introns ranging from 175 to 4,350 bp ³, located within a region of human chromosome 16q13. In addition,The extra exons encode the amino acids of the fibronectin-like domain which has so far been found in only the 72- and 92-kDa type IV collagenase². MMP2,which has a critical role in the binding of progelatinase A and TIMP4 via the C-terminal hemopexin-like domain (C domain)⁵, is functionally associated on the surface of angiogenic blood vessels⁶. NOT only is a likely effector of endometrial menstrual breakdown⁴, MMP2 is also effector and regulator of the inflammatory response⁷. Moreover, MMP2 could be helpful in diagnosing Takayasu arteritis⁸.

REFERENCE

1. Nagase, H.; Barrett, A. J.; Woessner, J. F., Jr. : Nomenclature and glossary of the matrix metalloproteinases. *Matrix* Suppl. 1: 421-424, 1992.

2. Collier, I. E.; Bruns, G. A. P.; Goldberg, G. I.; Gerhard, D. S. : On the structure and chromosome location of the 72- and 92-kDa human type IV collagenase genes. *Genomics* 9: 429-434, 1991.

3. Huhtala, P.; Chow, L. T.; Tryggvason, K. : Structure of the human type IV collagenase gene. *J. Biol. Chem.* 265: 11077-11082, 1990.

4. Irwin, J. C.; Kirk, D.; Gwatkin, R. B. L.; Navre, M.; Cannon, P.; Giudice, L. C. : Human endometrial matrix metalloproteinase-2, a putative menstrual proteinase: hormonal regulation in cultured stromal cells and messenger RNA expression during the menstrual cycle. *J. Clin. Invest.* 97: 438-447, 1996.

5. Bigg, H. F.; Shi, Y. E.; Liu, Y. E.; Steffensen, B.; Overall, C. M. : Specific, high affinity binding of tissue inhibitor of metalloproteinases-4 (TIMP-4) to the COOH-terminal hemopexin-like domain of human gelatinase A. *J. Biol. Chem.* 272: 15496-15500, 1997.

6. Brooks, P. C.; Silletti, S.; von Schalscha, T. L.; Friedlander, M.; Cheresh, D. A. : Disruption of angiogenesis by PEX, a noncatalytic metalloproteinase fragment with integrin binding activity. *Cell* 92: 391-400, 1998.

7. McQuibban, G. A.; Gong, J.-H.; Tam, E. M.; McCulloch, C. A. G.; Clark-Lewis, I.; Overall, C. M. : Inflammation dampened by gelatinase A cleavage of monocyte chemoattractant protein-3. *Science* 289: 1202-1206, 2000.

8. Matsuyama, A.; Sakai, N.; Ishigami, M.; Hiraoka, H.; Kashine, S.; Hirata, A.; Nakamura, T.; Yamashita, S.; Matsuzawa, Y. : Matrix metalloproteinases as novel disease markers in Takayasu arteritis. *Circulation* 108: 1469-1473, 2003.