



Anti-Matrix metalloproteinase 2(MMP-2), Rabbit-Polyclonal Antibody

Catalog No. GB-10342

Antigen species: Human

Host species: Rabbit

Quantity: 250 μ l

Reactivity: Human

Form: Antiserum

Applications tested: Western Blot

Target description

Metalloproteinases (MMPs) participate in cell migration and remodeling processes by affecting the extracellular matrix. MMP-2 is thought to be involved in cancer cell invasiveness. It has been proposed that the activity of MMP-2 can be modulated by intracellular reactive oxygen/nitrogen species (ROS/RNS). There are at least 15 members in the MMP family. MMP-2 (also called gelatinase A-type IV collagenase) is one member of the MMP family, were postulated to play a critical role in tumor invasion. Lotta et al. have shown that the activity of MMP-2 was higher in human breast cancer than the pre-malignant or normal breast tissue (1). In addition, in an experimental metastatic model, Stetler-Stevenson has concluded that the protein level and activity of both enzymes were correlated with the metastatic potential of tumor cells (2). A previous study has also indicated that MnSOD might upregulate the activation of MMP-2 to promote the invasiveness of tumors (3).

Antigen

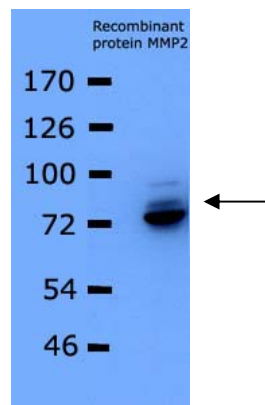
This polyclonal antibody was raised by immunizing rabbit with recombinant human MMP2 protein.

Application

The antibody specificity was assayed by Western blot analysis with recombinant human MMP2 protein. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/2,000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/10 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related products

1. Anti-MMP17 pAb (GB-10042).
2. Anti-MMP1 pAb (PY-10174).
3. Anti-MMP12(a.a.35-117) pAb (PY-10169).



IPTG induction of the recombinant protein expression for 2 hours. Human MMP2 (78.3 kDa)

2000X dilution of the first antibody: rabbit anti-MMP2 polyclonal antibody (serum).

X-ray film exposed 3 seconds with the ECL kit.

Western Blot Protocol

1. Block with 3%BSA/TBST for 1 hour at RT.
2. Wash blot with 0.05% TBST 3 X 15 minutes.
3. Add 2000X dilution of antibody.
4. Incubate for 1 hour at RT.
5. Wash blot with 0.05% TBST 3 X 15 minutes.
6. Add appropriate amount of correct secondary antibody, goat anti-rabbit antibody conjugated with HRP). Incubate for 1 hour at RT.
7. Wash blot 3 X 15 minutes with 0.05% TBST at RT.
8. Add HRP substrate and develop

Storage

It is supplied as lyophilized serum. Redissolve the lyophilized powder with 250 microliter sterile water will restore the original condition. Store at 4°C for short term application. For long-term storage, aliquot and store at -20°C.

References

- 1.Lotta, L. A. (1984) Am. J. Pathol. 117, 339-348.
- 2.Stetler-Stevenson, W. G. (1990) Cancer Metastasis Rev. 9, 289-303.
- 3.Lam, E. W., Zwacka, R., Seftor, E. A., Nieva, D. R., Davidson, B. L., Engelhardt, J. E., Hendrix, M. J., and Oberley, L. W. (1999) Free Radic. Biol. Med. 27(5-6), 572-579.

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