



## Anti-Matrix metalloproteinase 2(MMP12, a.a. 1-33), Chicken-Polyclonal Antibody

**Catalog No.** PY-10168      **Quantity:** 100µg      **Applications tested:** Western Blot  
**Antigen species:** Human      **Reactivity:** Human  
**Host species:** Chicken      **Form:** Antigen affinity purified antibody

### Target description

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 MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. It is thought that this protein is cleaved at both ends to yield the active enzyme, but this processing has not been fully described. The enzyme degrades soluble and insoluble elastin. It may play a role in aneurysm formation and studies in mice suggest a role in the development of emphysema.

### Antigen

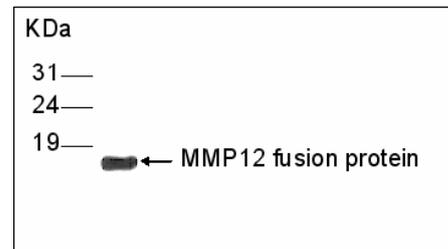
This polyclonal antibody was raised by immunizing chicken with MMP12 (a.a. 1-33) fusion protein.

### Application

Western blotting, tissue or cell immunostaining. Recommended starting dilution for Western blot analysis is 1:3000 (ECL method), for tissue or cell staining is 1:200. Optimal working dilutions must be determined by the end user.

### Related Products

1. Anti-MMP2 pAb (GB-10342).
2. Anti-MMP17 pAb (GB-10042).
3. Anti-MMP1 pAb (PY-10174).



### Western blot Protocol

1. Block membrane with 5% non-fat milk in PBS-T for 1 hour at room temperature or longer at 4°C.
2. Incubate membrane with IgY antibodies at dilution of 1: 5,000 with 1% milk in PBS-T at R.T. for 1 h.
3. Rinse 3 times with PBS-T, then wash membrane with PBS-T, 5 min each, total of 3 times.
4. Incubate with 2nd antibody (goat-anti-IgY/Fc-HRP) at dilution 1:10,000 for ECL (with 1% milk PBS-T) at R.T. for 1h.
5. Rinse 3 times with PBS-T, then wash with PBS-T, 5 min each with shaking, total of 3 times.
6. Perform ECL detection of signal using Pierce ECL kit.

### Storage

It is supplied as antigen affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### References

1. Morris, D. G.; Huang, X.; Kaminski, N.; Wang, Y.; Shapiro, S. D.; Dolganov, G.; Glick, A.; Sheppard, D. : Loss of integrin alpha-v-beta-6-mediated TGF-beta activation causes Mmp12-dependent emphysema. Nature 422: 169-173, 2003.