MMP12 Monoclonal Antibody

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>A11017</th>
<th>Category</th>
<th>Monoclonal Antibodies</th>
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<tbody>
<tr>
<td>Applications</td>
<td>WB, IHC</td>
<td>Observed MW</td>
<td>37kDa</td>
</tr>
<tr>
<td>Cross-reactivity</td>
<td>Human</td>
<td>Calculated MW</td>
<td>54kDa</td>
</tr>
</tbody>
</table>

**Immunogen Information**

- **Immunogen**: Recombinant protein of human MMP12
- **Gene ID**: 4321
- **Swiss prot**: P39900
- **Synonyms**: MMP12; HME; ME; MME; MMP-12; macrophage metalloelastase

**Product Information**

- **Source**: Rabbit
- **Isotype**: IgG
- **Purification method**: Affinity purification
- **Storage**: Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Background**

This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this 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. The encoded proprotein is proteolytically processed to generate the mature protease. This protease degrades soluble and insoluble elastin. This gene may play a role in aneurysm formation and mutations in this gene are associated with lung function and chronic obstructive pulmonary disease (COPD). This gene is part of a cluster of MMP genes on chromosome 11.

**Recommended Dilutions**

- **WB**: 1:500 - 1:2000
- **IHC**: 1:50 - 1:200

**Western blot analysis of extracts of various cell lines, using MMP12 antibody (A11017).**

Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

**Immunohistochemistry of paraffin-embedded mouse lung using MMP12 antibody (A11017) at dilution of 1:100 (40x lens).**

*Immunohistochemistry of paraffin-embedded human mammary cancer using MMP12 antibody (A11017) at dilution of 1:100 (40x lens).*