Rabbit anti TIMP-4 Polyclonal Antibody

**Synonym:** Tissue inhibitor of metalloproteinase 4 (TIMP-4)

**ANTIGEN PREPARATION**
A synthetic peptide corresponding to C-term of human TIMP-4. This sequence is identical among human, rat, mouse, chicken, dog and bovine.

**BACKGROUND**
Tissue Inhibitors of Metalloproteinases (TIMPs) inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells. TIMPs comprise a family of four members: TIMP1, 2, 3, 4. TIMP-1 and TIMP-2 have similar properties, while TIMP-3 and TIMP-4 are involved inflammation-induced apoptosis and in matrix turnover. TIMP-4 is overexpressed in pilocytic astrocytomas, cardiovascular tissue areas populated by abundant inflammatory cells, human blood derived lymphocytes, monocytes/macrophages and mast cells. The TIMP-4 and its putative partner CD63 are potential markers of the astroctic phenotype in patients with gliomas.

**PURIFICATION**
The Rabbit IgG is purified by Epitope Affinity Purification.

**FORMULATION**
This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2) containing antibody stabilizer.

**SPECIFICITY**
This antibody recognizes ~25 kDa of human TIMP-4 protein. This antibody reacts with human, rat, mouse. The other species are not tested.

**APPLICATIONS/SUGGESTED WORKING DILUTIONS**

<table>
<thead>
<tr>
<th>Method</th>
<th>Working Dilution</th>
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</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.1-1 µg/ml</td>
</tr>
<tr>
<td>ELISA</td>
<td>0.01-0.1 µg/ml</td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td>2-5 µg/ml</td>
</tr>
<tr>
<td>IHC</td>
<td>Not tested</td>
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<tr>
<td>Flow cytometry</td>
<td>Not tested</td>
</tr>
</tbody>
</table>

**MOLECULAR WEIGHT:** 25 kDa

**POSITIVE CONTROL:** Gliomas

**CELLULAR LOCATION:** Cytoplasmic / extracellular matrix

Optimal dilutions should be determined by researchers for the specific applications.

**DATA ATTACHMENTS**

Western Blot: The cell lysate derived from astrocytoma (SW-1783) was resolved onto 12% SDS-PAGE, transferred onto NC membrane, and immunoprobed by Rabbit anti-TIMP-4 (Cat#630-190) at 1:500. An immunoreactive band is observed around ~25 kDa (1). This band is abolished by pre-incubation with immunizing peptide (2).

**REFERENCES**