### DESCRIPTION

**Species Reactivity**  
Mouse

**Specificity**  
Detects mouse Mast Cell Protease-6/Mcpt6 in direct ELISAs and Western blots. In Western blots, 10% cross-reactivity with recombinant mouse (rm) MCP-7 is observed and no cross-reactivity with rmMCP-1 is observed.

**Source**  
Monoclonal Rat IgG, Clone # 286820

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
Mouse myeloma cell line NS0-derived recombinant mouse Mast Cell Protease-6/Mcpt6 Ile32-Ser276  
Accession # P21845

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.*

### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. **General Protocols** are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
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<tr>
<td>Immunoprecipitation</td>
<td>25 μg/mL</td>
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**Sample**  
Recombinant Mouse Mast Cell Protease-6/Mcpt6 (Catalog # 3736-SE)

Conditioned cell culture medium spiked with Recombinant Mouse Mast Cell Protease-6/Mcpt6 (Catalog # 3736-SE), see our available Western blot detection antibodies

### PREPARATION AND STORAGE

**Reconstitution**  
Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C*  

**Stability & Storage**  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

Tryptases are trypsin-like serine proteases, and β tryptases appear to be the main isoenzymes expressed in mast cells (1). Mast cell protease-6 (MCP-6, Mcpt6, or Tpsb2) is one of β tryptases produced from mouse mast cells. It is stored in secretory granules of mast cells, where it forms active tetramers with heparin proteoglycan. Because of the unique arrangement of the active sites in the tetramer, which are facing a narrow central pore, Mcpt6 is resistant to macromolecular protease inhibitors (2). When mast cells are activated, Mcpt6 is released along with other proteins in secretory granules, participating in provoking inflammatory conditions (3). Mcpt6 has been implicated as a mediator in the pathogenesis of asthma and other allergic disorders in mouse models.

### References: