

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Prostatic/Prss8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Prostatic is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 430814
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Prostatic/Prss8 Ala30-Gln289 Accession # NP_579929
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS and NaCl 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Mouse Prostatic/Prss8 (Catalog # 2968-SE)

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Prostatic encoded by the Prss8 gene, also known as channel activating protease 1, is a serine protease with a trypsin-like substrate specificity (1, 2). The preproenzyme possesses a C-terminal membrane-spanning domain that can be proteolytically processed to generate a secreted form of the enzyme. The secreted form of prostatic has been purified from seminal fluid (2). Prostatic is highly expressed in the prostate gland, and is expressed at lower levels in the lung, kidney, liver, salivary gland, and pancreas (3). The peptidase activity of prostatic is involved in the regulation of epithelial sodium channels (4, 5). The enzymatic activity of Prostatic is effectively inhibited by HAI-1 and HAI-2B (Catalog # 1141-PI and 1107-PI).

**References:**

1. Vuagniaux, G. *et al.* (2000) J. Am. Soc. Nephrol. **11**:828.
2. Yu J.X. *et al.* (1994) J. Biol. Chem. **269**:18843.
3. Yu J.X. *et al.* (1995) J. Biol. Chem. **270**:13483.
4. Caldwell R.A. *et al.* (2004) Am. J. Physiol. Cell Physiol. **286**:C190.
5. Tong Z. *et al.* (2004) Am. J. Physiol. Lung Cell Mol. Physiol. **287**:L928.