

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Prostasin/Prss8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Prostasin is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 430814
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Prostasin/Prss8 Ala30-Gln289 Accession # NP_579929
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS and NaCl with Trehalose. See Certificate of Analysis for details.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse Prostasin/Prss8 (Catalog # 2968-SE)

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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

Prostasin 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 proenzyme possesses a C-terminal membrane-spanning domain that can be proteolytically processed to generate a secreted form of the enzyme. The secreted form of prostasin has been purified from seminal fluid (2). Prostasin 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 prostasin is involved in the regulation of epithelial sodium channels (4, 5). The enzymatic activity of Prostasin 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.