

## DESCRIPTION

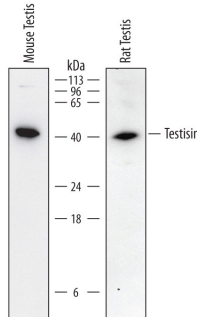
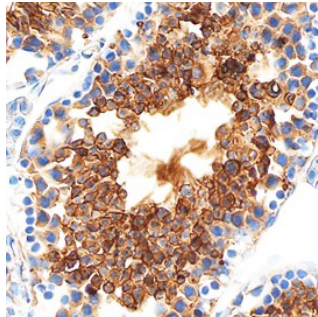
<b>Species Reactivity</b>	Mouse/Rat
<b>Specificity</b>	Detects recombinant mouse Testisin/Prss21 in direct ELISAs and Western blots. Detects mouse and rat Testisin/Prss21 in Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse (rm) Prss8 and rmPrss27 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Testisin/Prss21 Gln28-Asn298 Accession # Q9JHJ7
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Mouse and Rat Testisin/Prss21 by Western Blot.</b> Western blot shows lysates of mouse testis tissue and rat testis tissue. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Mouse Testisin/Prss21 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6820) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Testisin/Prss21 at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Testisin/Prss21 in Mouse Testis.</b> Testisin/Prss21 was detected in perfusion fixed frozen sections of mouse testis using Goat Anti-Mouse Testisin/Prss21 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6820) at 1.7 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to the plasma membranes of spermatocytes. View our protocol for <a href="#">Chromogenic IHC Staining of Frozen Tissue Sections</a>. This application has not been tested in rat samples.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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

Testisin is a serine protease encoded by the PRSS21 gene. Testisin is similar in structure to tryptases, and is also known as Trypsin-4 (1). It is predicted to have substrate specificity similar to that of trypsin (2). Testisin is most highly expressed in testicular germ cells, but is also present in eosinophils (3). Testisin is known to be required for spermatogenesis, and deficiencies of the enzyme can result in infertility (4, 5). Testisin is anchored to the cell surface through a C-terminal glycosylphosphatidylinositol anchor (6). Recombinant mouse Testisin is expressed with a truncated C-terminus, resulting in its secretion. The recombinant protein was purified as the zymogen and can undergo autoactivation under the appropriate conditions. Over aa 28-298, mouse Testisin shares 92% aa identity with rat Testisin.

### References:

1. Wong, G.W. *et al.* (2001) *J. Biol. Chem.* **276**:20648.
2. Hooper, J.D. *et al.* (2000) *Biochim. Biophys. Acta* **1492**:63.
3. Inoue, M. *et al.* (1998) *Biochem. Biophys. Res. Comm.* **252**:307.
4. Netzel-Arnett, S. *et al.* (2009) *Biol. Reprod.* **81**:921.
5. Kawano, N. *et al.* (2010) *Biol. Reprod.* **83**:359.
6. Honda, A. *et al.* (2002) *J. Biol. Chem.* **277**:16976.