

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Prostatic in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant mouse Prostatic is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Prostatic Ala33-Gly319 Accession # Q16651
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 as a 0.2 µm filtered solution in PBS.

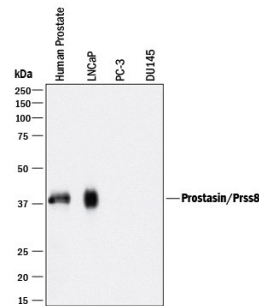
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Prostatic/Prss8 (Catalog # 4599-SE), see our available Western blot detection antibodies
Simple Western	10 µg/mL	See Below

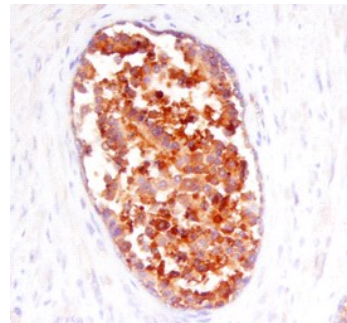
DATA

Western Blot



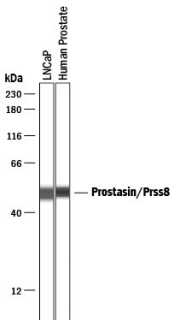
Detection of Human Prostatic/Prss8 by Western Blot. Western blot shows lysates of human prostate tissue, LNCaP human prostate cancer cell line, PC-3 human prostate cancer cell line, and DU145 human prostate carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Prostatic/Prss8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4599) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Prostatic/Prss8 at approximately 38 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Prostatic/Prss8 in Human Prostate Cancer Tissue. Prostatic/Prss8 was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using 10 µg/mL Sheep Anti-Human Prostatic/Prss8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4599) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained with the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human Prostatic/Prss8 by Simple Western™. Simple Western lane view shows lysates of human prostate tissue and LNCaP human prostate cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for Prostatic/Prss8 at approximately 50 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human Prostatic/Prss8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4599) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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. <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, also known as channel activating protease 1, is a serine protease with 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 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).

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**:C194.
5. Tong, Z. *et al.* (2004) *Am. J. Physiol. Lung Cell Mol. Physiol.* **287**:L928.