

**Anti-PSMA3 Picoband Antibody**  
**Catalog # ABO11707****Specification**

---

**Anti-PSMA3 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P25788</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Proteasome subunit alpha type-3(PSMA3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PSMA3 Picoband Antibody - Additional Information**

**Gene ID** 5684

**Other Names**

Proteasome subunit alpha type-3, 3.4.25.1, Macropain subunit C8, Multicatalytic endopeptidase complex subunit C8, Proteasome component C8, PSMA3, HC8, PSC8

**Calculated MW**

28433 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Cytoplasm. Nucleus.

**Protein Name**

Proteasome subunit alpha type-3

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human PSMA3 (88-127aa LADIAREEASNFRSNGYNIPLKHLADRVAMYVHAYTLYS), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-PSMA3 Picoband Antibody - Protein Information**

**Name** PSMA3 ([HGNC:9532](#))

**Synonyms** HC8, PSC8

**Function**

Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin- independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex). Binds to the C-terminus of CDKN1A and thereby mediates its degradation. Negatively regulates the membrane trafficking of the cell-surface thromboxane A2 receptor (TBXA2R) isoform 2.

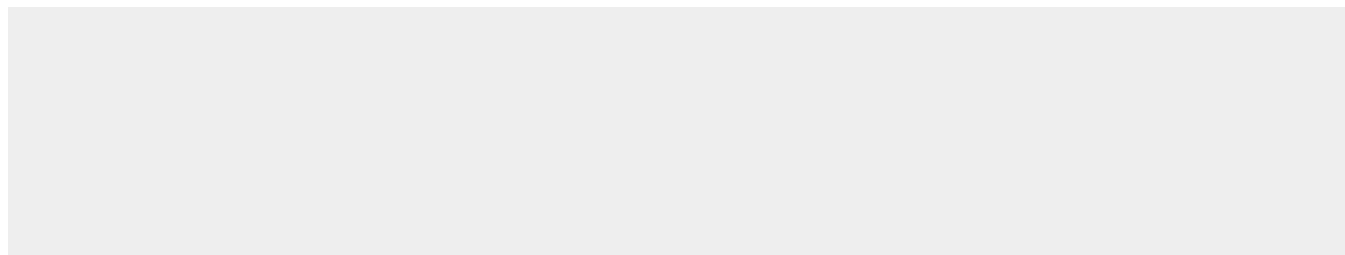
**Cellular Location**

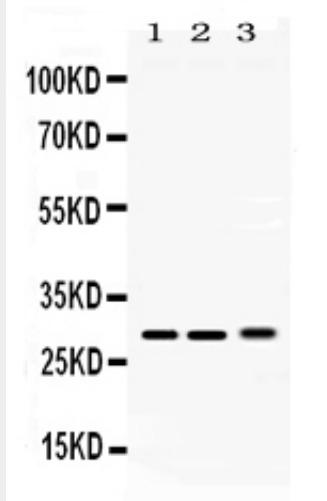
Cytoplasm. Nucleus. Note=Translocated from the cytoplasm into the nucleus following interaction with AKIRIN2, which bridges the proteasome with the nuclear import receptor IPO9

**Anti-PSMA3 Picoband Antibody - Protocols**

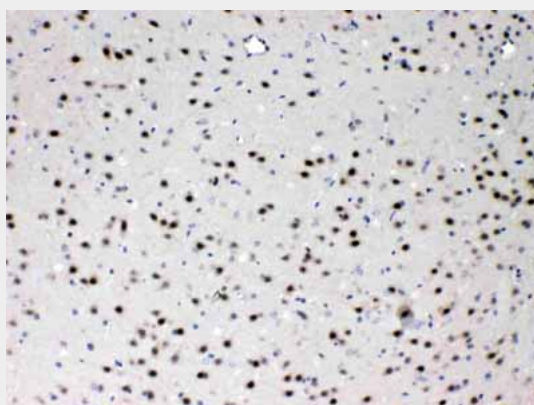
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

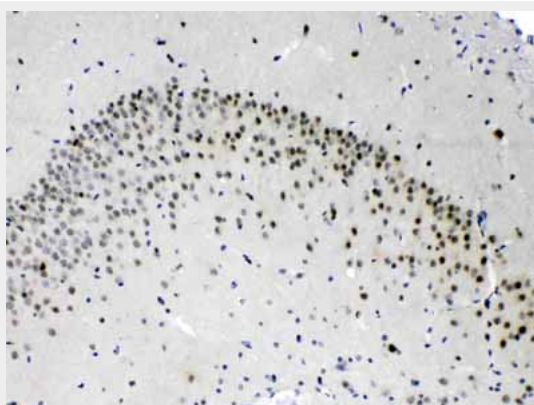
**Anti-PSMA3 Picoband Antibody - Images**



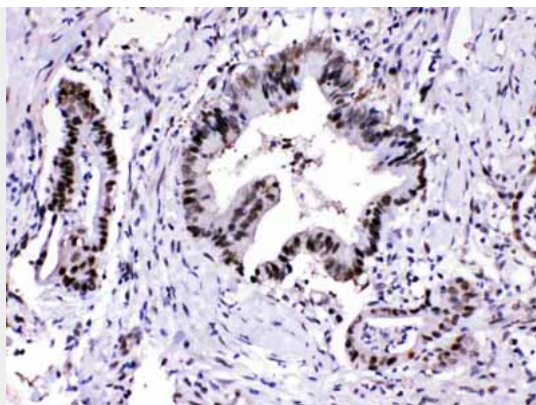
Western blot analysis of PSMA3 expression in rat testis extract (lane 1), mouse lung extract (lane 2) and 293T whole cell lysates (lane 3). PSMA3 at 28KD was detected using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



PSMA3 was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



PSMA3 was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



PSMA3 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-PSMA3 Picoband Antibody - Background**

Proteasome subunit alpha type-3, also known as macropain subunit C8 and proteasome component C8, is a protein that in humans is encoded by the PSMA3 gene. The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes a member of the peptidase T1A family, that is a 20S core alpha subunit. Two alternative transcripts encoding different isoforms have been identified.