10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PSMA3 Picoband Antibody

Catalog # ABO11707

Specification

Anti-PSMA3 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P25788
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 Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human PSMA3 (88-127aa LADIAREEASNFRSNFGYNIPLKHLADRVAMYVHAYTLYS), 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 r˚Constitution, 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

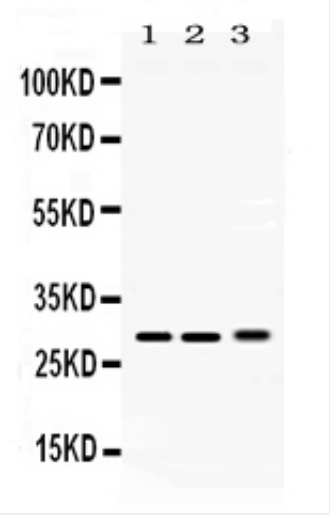
Anti-PSMA3 Picoband Antibody - Protocols

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

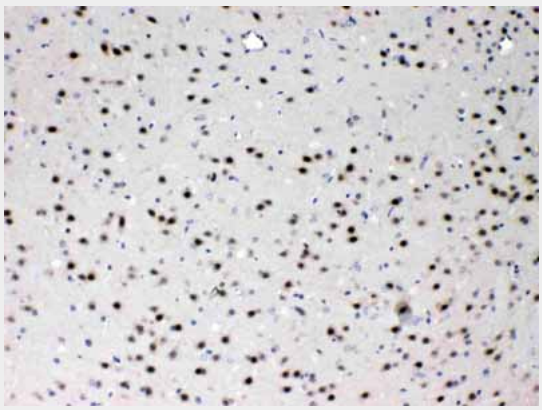
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PSMA3 Picoband Antibody - Images

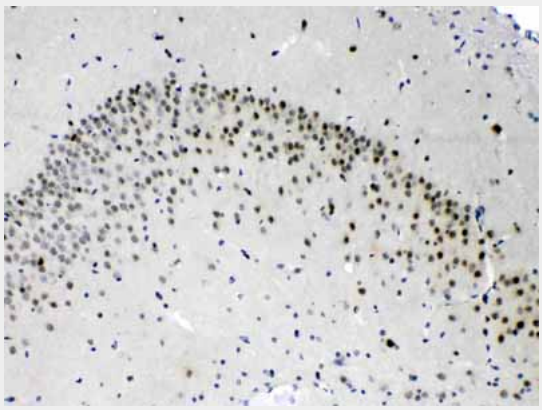
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .

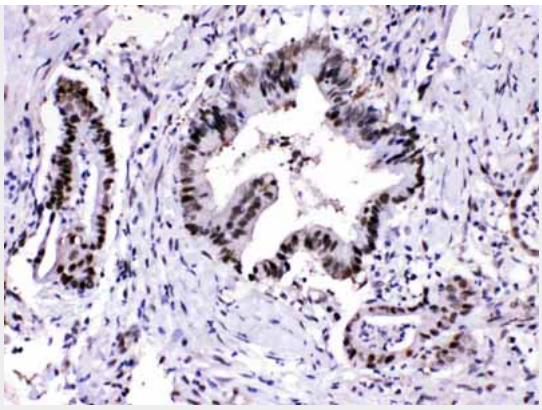


PSMA3 was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti-PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



PSMA3 was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



PSMA3 was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- PSMA3 Antigen Affinity purified polyclonal antibody (Catalog # ABO11707) at 1 ??g/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.