# PSMB7 Antibody (internal region) <br> Peptide-affinity purified goat antibody <br> Catalog \# AF3315a 

## Specification

PSMB7 Antibody (internal region) - Product Information

```
Application
Primary Accession
Other Accession
Reactivity
Predicted
Host
Clonality
Concentration
Isotype
Calculated MW
```


## WB

```
Q99436
NP 002790.1, 5695, 19177 (mouse), 85492
(rat)
Human, Mouse
Rat, Pig
Goat
Polyclonal
\(0.5 \mathrm{mg} / \mathrm{ml}\)
IgG
29965
```


## PSMB7 Antibody (internal region) - Additional Information

## Gene ID 5695

Other Names
Proteasome subunit beta type-7, 3.4.25.1, Macropain chain Z, Multicatalytic endopeptidase complex chain Z, Proteasome subunit Z, PSMB7, Z

## Format

$0.5 \mathrm{mg} / \mathrm{ml}$ in Tris saline, $0.02 \%$ sodium azide, pH 7.3 with $0.5 \%$ bovine serum albumin

## Storage

Maintain refrigerated at $2-8^{\circ} \mathrm{C}$ for up to 6 months. For long term storage store at $-20^{\circ} \mathrm{C}$ in small aliquots to prevent freeze-thaw cycles.

## Precautions

PSMB7 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

PSMB7 Antibody (internal region) - Protein Information

Name PSMB7

## Synonyms Z

## 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 19 S regulatory particles, forms the 26 S
proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins.
The 26 S 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 20 S 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). Within the 20S core complex, PSMB7 displays a trypsin-like activity.

## 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

## Tissue Location

Expressed at a low level in colonic mucosa. Up-regulated in colorectal cancer tissues.

## PSMB7 Antibody (internal region) - 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

PSMB7 Antibody (internal region) - Images

| 250 kDa |
| :---: | :---: | :---: | :---: |
| 150 kDa |
| 100 kDa |
| 75 kDa |
| 50 kDa |
| 37 kDa |$|$

AF3315a ( $0.3 \mu \mathrm{~g} / \mathrm{ml}$ ) staining of HEK293 lysate ( $35 \mu \mathrm{~g}$ protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## PSMB7 Antibody (internal region) - References

PSMB7 is associated with anthracycline resistance and is a prognostic biomarker in breast cancer.

Munkácsy G, Abdul-Ghani R, Mihály Z, Tegze B, Tchernitsa O, Surowiak P, Schäfer R, Györffy B. Br J Cancer. 2010 Jan 19;102(2):361-8. PMID: 20010949

