

PSMB7 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3315a

Specification

PSMB7 Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>Q99436</u> <u>NP_002790.1</u>, <u>5695</u>, <u>19177 (mouse)</u>, <u>85492</u> (<u>rat)</u> Human, Mouse Rat, Pig Goat Polyclonal 0.5 mg/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 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°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 (HGNC:9544)

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 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). 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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PSMB7 Antibody (internal region) - Images



AF3315a (0.3 μ g/ml) staining of HEK293 lysate (35 μ 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