

**PSMA5 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8566b**

**Specification**

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**PSMA5 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P28066</a>
Other Accession	<a href="#">Q5E987</a> , <a href="#">Q9Z2U1</a>
Reactivity	Human
Predicted	Bovine, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	26411

**PSMA5 Antibody - Additional Information**

**Gene ID** 5686

**Other Names**

Proteasome subunit alpha type-5, 3.4.25.1, Macropain zeta chain, Multicatalytic endopeptidase complex zeta chain, Proteasome zeta chain, PSMA5

**Target/Specificity**

This PSMA5 antibody is generated from a mouse immunized with a recombinant protein between 1-241 amino acids from human PSMA5.

**Dilution**

WB~~1:4000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PSMA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PSMA5 Antibody - Protein Information**

**Name** PSMA5 ([HGNC:9534](#))

**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).

#### 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

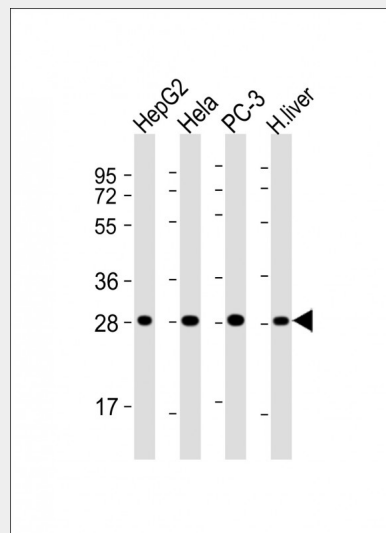
Expressed in fetal brain (at protein level).

### PSMA5 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](#)

### PSMA5 Antibody - Images



All lanes : Anti-PSMA5 Antibody at 1:4000 dilution Lane 1: HepG2 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: PC-3 whole cell lysate Lane 4: human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

### PSMA5 Antibody - Background

The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH. The proteasome has an ATP-dependent proteolytic activity.

#### **PSMA5 Antibody - References**

- DeMartino G.N., et al. *Biochim. Biophys. Acta* 1079:29-38(1991).  
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Ota T., et al. *Nat. Genet.* 36:40-45(2004).  
Gregory S.G., et al. *Nature* 441:315-321(2006).  
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.