

# PSMA5 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8566b

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P28066</a>
<b>Other Accession</b>	<a href="#">Q5E987</a> , <a href="#">Q9Z2U1</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Bovine, Mouse
<b>Host</b>	Mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1,k
<b>Clone Names</b>	426CT32.1.2
<b>Calculated MW</b>	26411

## Additional Information

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<b>Gene ID</b>	5686
<b>Other Names</b>	Proteasome subunit alpha type-5, 3.4.25.1, Macropain zeta chain, Multicatalytic endopeptidase complex zeta chain, Proteasome zeta chain, PSMA5
<b>Target/Specificity</b>	This PSMA5 antibody is generated from a mouse immunized with a recombinant protein between 1-241 amino acids from human PSMA5.
<b>Dilution</b>	WB~~1:4000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	PSMA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	PSMA5 ( <a href="#">HGNC:9534</a> )
<b>Function</b>	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).

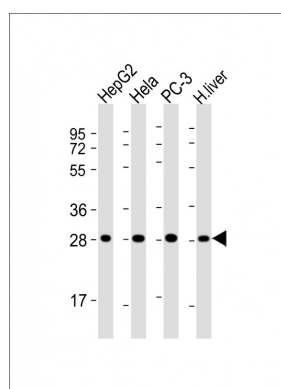
## Background

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.

## 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.

## 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% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.