

### PSMA1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PSMA1. Catalog # AT3453a

#### Specification

## **PSMA1** Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IF <u>P25786</u> <u>BC002577</u> Human mouse Monoclonal IgG1 kappa 29556

## PSMA1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 5682

**Other Names** Proteasome subunit alpha type-1, 30 kDa prosomal protein, PROS-30, Macropain subunit C2, Multicatalytic endopeptidase complex subunit C2, Proteasome component C2, Proteasome nu chain, PSMA1, HC2, NU, PROS30, PSC2

**Target/Specificity** PSMA1 (AAH02577, 1 a.a. ~ 263 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 IF~~1:50~200

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** PSMA1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PSMA1 Antibody (monoclonal) (M01) - Protocols

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

<u>Western Blot</u>



- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# PSMA1 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to PSMA1 on HeLa cell. [antibody concentration 60 ug/ml]



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (54.67 KDa).

175 -83 -62 -47.5 -32.5 -25 -16.5 -6.5 -



PSMA1 monoclonal antibody (M01), clone 1D9-1C7 Western Blot analysis of PSMA1 expression in HeLa ( (Cat # AT3453a )



Western Blot analysis of PSMA1 expression in transfected 293T cell line by PSMA1 monoclonal antibody (M01), clone 1D9-1C7.

Lane 1: PSMA1 transfected lysate(30.2 KDa). Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged PSMA1 is approximately 3ng/ml as a capture antibody.

#### PSMA1 Antibody (monoclonal) (M01) - Background

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. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

# PSMA1 Antibody (monoclonal) (M01) - References



1. The Role of Translationally Controlled Tumor Protein in Tumor Growth and Metastasis of Colon Adenocarcinoma Cells. Ma Q, Geng Y, Xu W, Wu Y, He F, Shu W, Huang M, Du H, Li M.J Proteome Res. 2009 Aug 11. [Epub ahead of print]