

Product datasheet for **CF500694**

PSMA7 Mouse Monoclonal Antibody [Clone ID: OTI8F9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI8F9
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:500, IF 1:100, Flow 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PSMA7 (NP_002783) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	27.9 kDa
Gene Name:	proteasome 20S subunit alpha 7
Database Link:	NP_002783 Entrez Gene 26444 Mouse Entrez Gene 29674 Rat Entrez Gene 5688 Human Q14818



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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. This particular subunit has been shown to interact specifically with the hepatitis B virus X protein, a protein critical to viral replication. In addition, this subunit is involved in regulating hepatitis virus C internal ribosome entry site (IRES) activity, an activity essential for viral replication. This core alpha subunit is also involved in regulating the hypoxia-inducible factor-1alpha, a transcription factor important for cellular responses to oxygen tension. Multiple isoforms of this subunit arising from alternative splicing may exist but alternative transcripts for only two isoforms have been defined. A pseudogene has been identified on chromosome 9.

Synonyms:

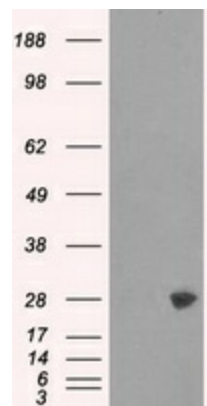
C6; HEL-S-276; HSPC; RC6-1; XAPC7

Protein Families:

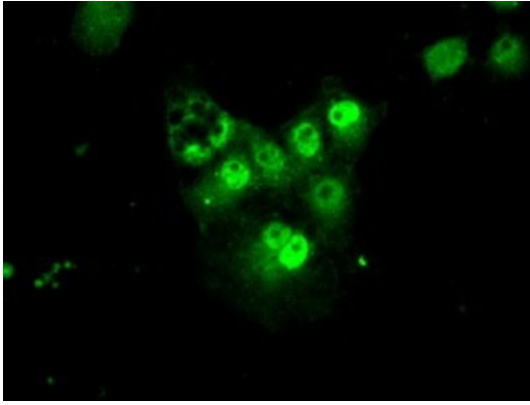
Druggable Genome, Protease

Protein Pathways:

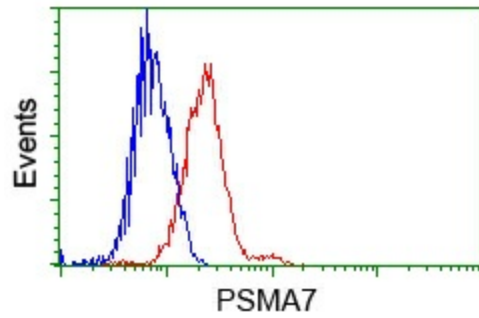
Proteasome

Product images:

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PSMA7 ([RC201169], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMA7. Positive lysates [LY400987] (100ug) and [LC400987] (20ug) can be purchased separately from OriGene.



Anti-PSMA7 mouse monoclonal antibody ([TA500694]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMA7 ([RC201169]).



Flow cytometric analysis of Jurkat cells, using anti-PSMA7 antibody ([TA500694]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).