

Product datasheet for TA500691

PSMA7 Mouse Monoclonal Antibody [Clone ID: OTI3F11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3F11
Applications:	FC, WB
Recommend Dilution:	WB 1:2000, Flow 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PSMA7 (NP_002783) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.66 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Predicted Protein Size:	27.9 kDa
Gene Name:	proteasome subunit alpha 7
Database Link:	NP_002783 Entrez Gene 5688 Human



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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:

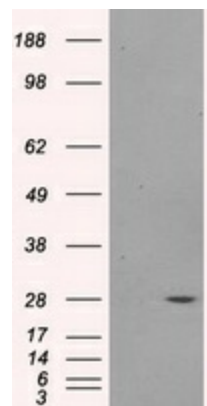
C6; HEL-S-276; HSPC; RC6-1; XAPC7

Protein Families:

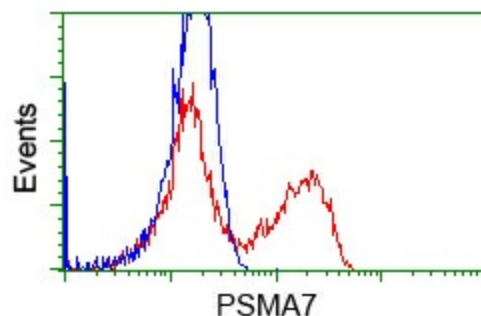
Druggable Genome, Protease

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.



HEK293T cells transfected with either pCMV6-ENTRY PSMA7 ([RC201169]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-PSMA7 mouse monoclonal (TA500691, Dilution 1:1,000), and then analyzed by flow cytometry.