

Product datasheet for TA500691M

OriGene Technologies, Inc.

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PSMA7 Mouse Monoclonal Antibody [Clone ID: OTI3F11]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI3F11
Applications: FC, WB

Recommended Dilution: WB 1:2000, Flow 1:100

Reactivity: Human, Mouse, Rat

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)

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 MouseEntrez Gene 29674 RatEntrez Gene 5688 Human

014818





Background:

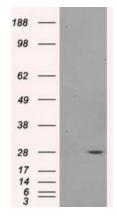
The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout 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.

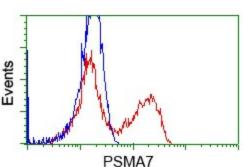
Synonyms: C6; HEL-S-276; HSPC; RC6-1; XAPC7

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.