

Product datasheet for **SC319465**

PSMA7 (NM_002792) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMA7 (NM_002792) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSMA7
Synonyms:	C6; HEL-S-276; HSPC; RC6-1; XAPC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>>OriGene sequence for NM_002792.2</p> <pre>GCGGGTGC GCGCAGGCCGTGAGTGTGCGCTTTTGAGAGTCGCGGGGAAGGAGCCCCGGCC GCCGCCCGCCGGCATGAGCTACGACCGGCCATCACCGTCTTCTGCCCGACGGCCACCT CTTCCAAGTGGAGTACGCGCAGGAGGCCGTCAAGAAGGGCTCGACCGCGTTGGTGTTCG AGGAAGAGACATTGTTGTTCTTGGTGTGGAGAAGAAGTCAGTGGCCAAACTGCAGGATGA AAGAACAGTGC GGAAGATCTGTGCTTTGGATGACAACGTCGATGGCCTTTCAGGCCT CACCGCCGATGCAAGGATAGTCATCAACAGGGCCCGGGTGGAGTGCCAGAGCCACCGGCT GACTGTGGAGGACCCGGTCACTGTGGAGTACATCACCCGCTACATCGCCAGTCTGAAGCA GCGTTATACGCAGAGCAATGGGCGCAGGCCGTTTGGCATCTCTGCCCTCATCGTGGGTTT CGACTTTGATGGCACTCCTAGGCTCTATCAGACTGACCCCTCGGGCACATAACCATGCCTG GAAGGCCAATGCCATAGGCCGGGTGCCAAGTCAGTGCCTGAGTTCCTGGAGAAGAACTA TACTGACGAAGCCATTGAAACAGATGATCTGACCATTAAGCTGGTGATCAAGGCACTCCT GGAAGTGGTTCAGTCAGGTGGCAAAAACATTGAACTTGCTGTCATGAGGCGAGATCAATC CCTCAAGATTTTAAATCCTGAAGAAATTGAGAAGTATGTTGCTGAAATTGAAAAAGAAA AGAAGAAAACGAAAAGAAGAAACAAAAGAAAGCATCATGATGAATAAAATGTCTTTGCTT GTAATTTTAAATTCATATCAATCATGGATGAGTCTCGATGTGTAGGCCTTTCCATTCCA TTTATTCACACTGAGTGTCTACAATAAACTTCCGTATTTTTAACCTGAAAAAAAAAAAA AAAAAA</pre>
Restriction Sites:	Please inquire
ACCN:	NM_002792



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002792.2](#), [NP_002783.1](#)

RefSeq Size: 984 bp

RefSeq ORF: 747 bp

Locus ID: 5688

UniProt ID: [O14818](#)

Cytogenetics: 20q13.33

Domains: proteasome

Protein Families: Druggable Genome, Protease

Protein Pathways: Proteasome

Gene Summary:

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. This gene encodes a member of the peptidase T1A family that functions as a 20S core alpha subunit. The encoded protein interacts with the hepatitis B virus X protein and plays a role in regulating hepatitis C virus internal ribosome entry site (IRES) activity, an activity essential for viral replication. The encoded protein also plays a role in the cellular stress response by regulating hypoxia-inducible factor-1alpha. A pseudogene of this gene is located on the long arm of chromosome 9. [provided by RefSeq, Jul 2012]