

Product datasheet for **SC109640**

PSMA1 (NM_002786) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMA1 (NM_002786) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSMA1
Synonyms:	HC2; HEL-S-275; NU; PROS30
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109640 sequence for NM_002786 edited (data generated by NextGen Sequencing)

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ATGTTTCGAAATCAGTATGACAATGATGTCACCTGTTTGGAGCCCCAGGGCAGGATTCAT
CAAATTGAATATGCAATGGAAGCTGTTAAACAAGGTTTCAGCCACAGTTGGTCTGAAATCA
AAAACATGCAGTTTTGGTTGCATTGAAAAGGGCGCAATCAGAGCTTGCAGCTCATCAG
AAAAAAATTCTCCATGTTGACAACCATATTGGTATCTCAATTGCGGGGCTTACTGCTGAT
GCTAGACTGTTATGTAATTTTATGCGTCAGGAGTGTGGATTCCAGATTTGATTTCGAT
AGACCACTGCCTGTGTCTCGTCTTGTATCTCTAATTGGAAGCAAGACCCAGATACCAACA
CAACGATATGGCCGGAGACCATATGGTGTGGTCTCCTTATTGCTGGTTATGATGATATG
GGCCCTCACATTTTCAAACCTGTCCATCTGCTAACTATTTTGACTGCAGAGCCATGTCC
ATTGGAGCCCGTTCCCAATCAGCTCGTACTTACTTGGAGAGACATATGTCTGAATTTATG
GAGTGTAAATTAATGAACTAGTTAAACATGGTCTGCGTGCCTTAAGAGAGACGCTTCCT
GCAGAACAGGACCTGACTACAAAGAATGTTCCATTGGAATTGTTGGTAAAGACTTGGAG
TTTACAATCTATGATGATGATGATGTGTCTCCATTCTGGAAGGTCTTGAAGAAAGACCA
CAGAGAAAGGCACAGCCTGCTCAACCTGCTGATGAACCTGCAGAAAAGGCTGATGAACCA
ATGGAACATTAA
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Clone variation with respect to NM_002786.3



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_002786 unedited NGGGGTTGCACATTTGTATACGACTCATATAGGCGGCCGCGAAATTCGCACGAGGCTCTG TAGATCGCTGAGCGATACTTTCCGGCAGCACCTCCTTGATTCTCAGTTTTGCTGGAGGCCG CAACCAGGCCCGCCGCCACCATGTTTCGAAATCAGTATGCAATGGAAGCTGTTAAACAAGTTC GAGCCCCAGGGCAGGATTCATCAAATTGAATATGCAATGGAAGCTGTTAAACAAGTTC AGCCACAGTTGGTCTGAAATCAAAAACCTCATGCAGTTTTGGTTGCATTGAAAAGGGCGCA ATCAGAGCTTGCAGCTCATCAGAAAAAATTCTCCATGTTGACAACCATATTGGTATCTC AATTGCGGGGCTTACTGCTGATGCTAGACTGTTATGTAATTTTATGCGTCAGGAGTGTTC GGATTCCAGATTTGTATTGATAGACCACTGCCTGTGTCTCGTCTGTATCTCTAATTGG AAGCAAGACCCAGATACCAACACAACGATATGGCCGGAGACCATATGGTGTGGTCTCCT TATTGCTGGTTATGATGATATGGGCCCTCACATTTTCCAAACCTGTCCATCTGCTAACTA TTTTGACTGCAGAGCCATGTCCATTGGAGCCCGTTCCCAATCAGCTCGTACTTACTTGG GAGACATATGTCTGAATTTATGGAGTGAATTTAAATGAACTAGTTAAACATGGNTCTGC GTGCCTTAAGAGAGACGCTTCTGCAGAACAGGACCTGACTACAAAAATGTTTCCATTGG AATTGTTGGTAAAGACTTGGAGTTTACAATCTATGATGATGATGATGTGTCTCCATCCC TGGAAAGTCTTGNAGAAAGACCACAGAGAAAGGCACAGCCTGCTCAACCTGCTGATGAAC CTGCAGAAAGGA
Restriction Sites:	NotI-NotI
ACCN:	NM_002786
Insert Size:	1250 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_002786.2 , NP_002777.1
RefSeq Size:	1238 bp
RefSeq ORF:	792 bp
Locus ID:	5682
UniProt ID:	P25786
Cytogenetics:	11p15.2
Domains:	proteasome
Protein Families:	Druggable Genome, Protease

Protein Pathways: Proteasome

Gene Summary: 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.[provided by RefSeq, Jan 2009]

Transcript Variant: This variant (2) differs in the 5' UTR and 5' coding region, compared to variant 1. The encoded isoform (2), also known as the short isoform, has a shorter N-terminus compared to isoform 1.