

# Product datasheet for RG208272

### PSMA2 (NM\_002787) Human Tagged ORF Clone

### **Product data:**

#### **OriGene Technologies, Inc.**

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Product Type:	Expression Plasmids
Product Name:	PSMA2 (NM_002787) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSMA2
Synonyms:	HC3; MU; PMSA2; PSC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	<pre>&gt;RG208272 representing NM_002787 Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGCC</mark>

ATGGCGGAGCGCGGGTACAGCTTTTCGCTGACTACATTCAGCCCGTCTGGTAAACTTGTCCAGATTGAAT ATGCTTTGGCTGCTGTAGCTGGAGGAGGCCCCGTCCGTGGGAATTAAAGCTGCAAATGGTGTGGTATTAGC AACTGAGAAAAAACAGAAATCCATTCTGTATGATGAGGGCAAGTGTACACAAAGTAGAACCAATTACCAAG CATATAGGTTTGGTGTACAGTGGCATGGGCCCCGATTACAGAGTGCACACAAAGTAGAACCAATTACCAAG CTCAACAATACTATCTTGTGTACCAAGAACCCATTCCTACAGCTCAGCTGGTACAGAGAGTAGCTTCTGT GATGCAAGAATATACTCAGTCAGGTGGTGTTCGTCCATTTGGAGTTTCTTTACTTATTTGTGGTTGGAAT GAGGGACCACCATATTTATTTCAGTCAGATCCATCTGGAGCTTACTTTGCCTGGAAAGCTACAGCAATGG GAAAGAACTATGTGAATGGGAAGACTTTCCTTGAGAAAAGATATAATGAAGATCTGGAACTTGAAGATGC CATTCATACAGCCATCTTAACCCTAAAGGAAAGCTTTGAAGGGCAAAATGACAGAGGATAACATAGAAGTT GGAATCTGCAATGAAGCTGGATTTAGGAGAGCTTTACTCCAACTGAAGGATAACATAGAAGTT GGAATCTGCAATGAAGCTGGATTTAGGAGGCTTACTCCAACTGAAGTTAACTTGGCTGCCATAG CA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence:	<pre>&gt;RG208272 representing NM_002787 Red=Cloning site Green=Tags(s)</pre>
	MAERGYSFSLTTFSPSGKLVQIEYALAAVAGGAPSVGIKAANGVVLATEKKQKSILYDERSVHKVEPITK HIGLVYSGMGPDYRVLVHRARKLAQQYYLVYQEPIPTAQLVQRVASVMQEYTQSGGVRPFGVSLLICGWN EGRPYLFQSDPSGAYFAWKATAMGKNYVNGKTFLEKRYNEDLELEDAIHTAILTLKESFEGQMTEDNIEV GICNEAGFRRLTPTEVKDYLAAIA
	TRTRPLE - GFP Tag - V
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling:
	Kozac         Consensus         Consensus         Asc I           EcoR I         BamH I Kpn I         RBS         Sgf I         Asc I           CTATAGGGCGGCCGGGAATTCGTCGACCGGTACCGAGGAGATCTGCCGCCGCGGCGCGGCGCGCGC
	Hind III Nhe I Rsr II <u>Miu I Noti</u> Xho I GFP Tag CAAGCTTAACTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC T R T R P L E <u>M E S D</u>
	GAA GAA AGA GAT TAA ACGGCCGGCCGCGGAGCT E E R V stop

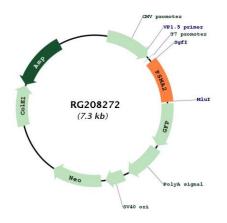
ACCN:	NM_002787
ORF Size:	702 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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).

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## **PSMA2 (NM\_002787) Human Tagged ORF Clone – RG208272**

Reconstitution Method:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 002787.5</u>
RefSeq Size:	1477 bp
RefSeq ORF:	705 bp
Locus ID:	5683
UniProt ID:	<u>P25787</u>
Cytogenetics: Domains:	7p14.1 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. [provided by RefSeq, Jul 2008]

### **Product images:**



Circular map for RG208272

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