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Product datasheet for SC301976

PSMA (FOLH1) (NM_001014986) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMA (FOLH1) (NM_001014986) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSMA
Synonyms:	FGCP; FOLH; GCP2; GCPII; mGCP; NAALAD1; NAALAdase; PSM; PSMA
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

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>OriGene sequence for NM_001014986 edited
ATGTGGAATCTCCTTCACGAAACCGACTCGGCTGTGGCCACCGCGCGCCGCCCGCGCTGG
CTGTGCGCTGGGGCGCTGGTGCTGGCGGGTGGCTTCTTTCTCCTCGGCTTCCTCTTCGGG
TGGTTTATAAAATCCTCCAATGAAGCTACTAACATTACTCCAAAGCATAATATGAAAGCA
TTTTTGGATGAATTGAAAGCTGAGAACATCAAGAAGTTCTTATATAATTTTACACAGATA
CCACATTTAGCAGGAACAGAACAAAACTTTCAGCTTGCAAAGCAAATTCAATCCCAGTGG
AAAGAATTTGGCCTGGATTCTGTTGAGCTAGCACATTATGATGTCCTGTTGTCCTACCCA
AATAAGACTCATCCCAACTACATCTCAATAATTAATGAAGATGGAAATGAGATTTTCAAC
ACATCATTATTTGAACCACCTCCTCCAGGATATGAAAATGTTTCGGATATTGTACCACCT
TTCAGTGCTTTCTCTCCTCAAGGAATGCCAGAGGGCGATCTAGTGTATGTTAACTATGCA
CGAACTGAAGACTTCTTTAAATTGGAACGGGACATGAAAATCAATTGCTCTGGGAAAATT
GTAATTGCCAGATATGGGAAAGTTTTCAGAGGAAATAAGGTTAAAAATGCCCAGCTGGCA
GGGGCCAAAGGAGTCATTCTCTACTCCGACCCTGCTGACTACTTTGCTCCTGGGGTGAAG
TCCTATCCAGATGGTTGGAATCTTCCTGGAGGTGGTGTCCAGCGTGGAAATATCCTAAAT
CTGAATGGTGCAGGAGACCCTCTCACACCAGGTTACCCAGCAAATGAATATGCTTATAGG
CGTGGAATTGCAGAGGCTGTTGGTCTTCCAAGTATTCCTGTTCATCCAATTGGATACTAT
GATGCACAGAAGCTCCTAGAAAAAATGGGTGGCTCAGCACCACCAGATAGCAGCTGGAGA
GGAAGTCTCAAAGTGCCCTACAATGTTGGACCTGGCTTTACTGGAAACTTTTCTACACAA
AAAGTCAAGATGCACATCCACTCTACCAATGAAGTGACAAGAATTTACAATGTGATAGGT
ACTCTCAGAGGAGCAGTGGAACCAGACAGATATGTCATTCTGGGAGGTCACCGGGACTCA
TGGGTGTTTGGTGGTATTGACCCTCAGAGTGGAGCAGCTGTTGTTCATGAAATTGTGAGG
AGCTTTGGAACACTGAAAAAGGAAGGGTGGAGACCTAGAAGAACAATTTTGTTTGCAAGC
TGGGATGCAGAAGAATTTGGTCTTCTTGGTTCTACTGAGTGGGCAGAGGAGAATTCAAGA
CTCCTTCAAGAGCGTGGCGTGGCTTATATTAATGCTGACTCATCTATAGAAGGAAACTAC
ACTCTGAGAGTTGATTGTACACCGCTGATGTACAGCTTGGTACACAACCTAACAAAAGAG
CTGAAAAGCCCTGATGAAGGCTTTGAAGGCAAATCTCTTTATGAAAGTTGGACTAAAAAA
AGTCCTTCCCCAGAGTTCAGTGGCATGCCCAGGATAAGCAAATTGGGATCTGGAAATGAT
TTTGAGGTGTTCTTCCAACGACTTGGAATTGCTTCAGGCAGAGCACGGTATACTAAAAAT
TGGGAAACAAACAAATTCAGCGGCTATCCACTGTATCACAGTGTCTATGAAACATATGAG
TTGGTGGAAAAGTTTTATGATCCAATGTTTAAATATCACCTCACTGTGGCCCAGGTTCGA
GGAGGGATGGTGTTTGAGCTAGCCAATTCCATAGTGCTCCCTTTTGATTGTCGAGATTAT
GCTGTAGTTTTAAGAAAGTATGCTGACAAAATCTACAGTATTTCTATGAAACATCCACAG
GAAATGAAGACATACAGTGTATCATTTGATTCACTTTTTTCTGCAGTAAAGAATTTTACA
GAAATTGCTTCCAAGTTCAGTGAGAGACTCCAGGACTTTGACAAAAGCAAGCATGTCATC
TATGCTCCAAGCAGCCACAACAAGTATGCAGGGGAGTCATTCCCAGGAATTTATGATGCT
CTGTTTGATATTGAAAGCAAAGTGGACCCTTCCAAGGCCTGGGGAGAAGTGAAGAGACAG
ATTTATGTTGCAGCCTTCACAGTGCAGGCAGCTGCAGAGACTTTGAGTGAAGTAGCCTAA
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Restriction Sites: Please inquire

ACCN: NM_001014986

Insert Size: 2200 bp

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_001014986.1, NP_001014986.1
RefSeq Size:	2560 bp
RefSeq ORF:	2160 bp
Locus ID:	2346
UniProt ID:	Q04609
Cytogenetics:	11p11.12
Protein Families:	Druggable Genome, Protease, Transmembrane

Gene Summary:

This gene encodes a type II transmembrane glycoprotein belonging to the M28 peptidase family. The protein acts as a glutamate carboxypeptidase on different alternative substrates, including the nutrient folate and the neuropeptide N-acetyl-l-aspartyl-l-glutamate and is expressed in a number of tissues such as prostate, central and peripheral nervous system and kidney. A mutation in this gene may be associated with impaired intestinal absorption of dietary folates, resulting in low blood folate levels and consequent hyperhomocysteinemia. Expression of this protein in the brain may be involved in a number of pathological conditions associated with glutamate excitotoxicity. In the prostate the protein is up-regulated in cancerous cells and is used as an effective diagnostic and prognostic indicator of prostate cancer. This gene likely arose from a duplication event of a nearby chromosomal region. Alternative splicing gives rise to multiple transcript variants encoding several different isoforms. [provided by RefSeq, Jul 2010]
Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.
Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.