

Product datasheet for RC218310L3

OriGene Technologies, Inc.

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PSMA (FOLH1) (NM_004476) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PSMA (FOLH1) (NM_004476) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PSMA

Synonyms: FGCP; FOLH; GCP2; GCPII; mGCP; NAALAD1; NAALAdase; PSM; PSMA

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218310).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_004476

ORF Size: 2250 bp





PSMA (FOLH1) (NM_004476) Human Tagged Lenti ORF Clone - RC218310L3

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. More info

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).

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: <u>NM 004476.1</u>

 RefSeq Size:
 2653 bp

 RefSeq ORF:
 2253 bp

 Locus ID:
 2346

 UniProt ID:
 Q04609

Cytogenetics: 11p11.12

Domains: PA, TFR dimer, Peptidase M28

Protein Families: Druggable Genome, Protease, Transmembrane

MW: 84.2 kDa

Gene Summary: This gene encodes a type II transmembrane glycoprotein belonging to the M28 peptidase

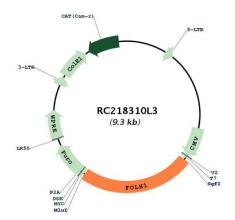
family. The protein acts as a glutamate carboxypeptidase on different alternative substrates, including the nutrient folate and the neuropeptide N-acetyl-l-aspartyl-l-glutamate and is expressed in a number of tissues such as prostate, central and peripheral nervous system and kidney. A mutation in this 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

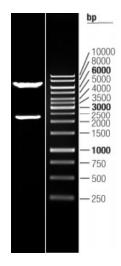
isoforms. [provided by RefSeq, Jul 2010]



Product images:



Circular map for RC218310L3



Double digestion of RC218310L3 using Sgfl and Mlul $\,$