

## Product datasheet for **MR227325**

### Psap (NM\_001146122) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Psap (NM_001146122) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Psap
Synonyms:	AI037048; SGP; SGP-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR227325 representing NM\_001146122  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTACGCCCTCGCCCTCTTCGCCAGCCTTCTGGCCACCCTCTGACCAGCCCTGTCCAAGACCCGAAGA  
 CATGCTCTGGGGCTCAGCAGTCTGTGCAGAGATGTGAAGACGGCGGTGGACTGTGGGGCGTGAAGCA  
 CTGCCAGCAGATGGTCTGGAGCAAGCCACAGCGAAATCCCTTCCTTGGACATATGCAAACTGTTGTC  
 ACCGAAGCTGGAACTTCTGAAAGATAATGCTACGCAGGAGGAGATCCTTACCTGGAGAAGACCT  
 GTGAGTGGATTATGACTCCAGCCTGTCCGCTCGTGAAGGAGGTGGTTGACTCTTACCTGCCTGTCAT  
 CCTGGACATGATTAAGGGCGAGATGAGCAACCCTGGGGAAGTGTGCTCTGCGCTCAACCTCTGCCAGTCC  
 CTTCAGGAGTACTTGGCCGAGCAAAACCAGAAACAGCTTGAGTCCAACAAGATCCCGAGGTGGACATGG  
 CCCGTGTGGTTGCCCTTCATGTCCAACATCCCTCTCCTGCTGTACCCTCAGGATCACCCCGCAGCCA  
 GCCCAACCTAAGGCTAACGAGGACGTCTGCCAGGACTGTATGAAGCTGGTGTCTGATGTCCAGACTGCT  
 GTGAAGACCAACTCCAGCTTTATCCAGGGCTTCGTGGACCACGTGAAGGAGGATTGTGACCGCTTGGGGC  
 CAGGCGTGTCTGACATATGCAAGAACTACGTGGACCAGTATTCCGAGGTCTGTGTCCAGATGTTGATGCA  
 CATGGATCAGCAACCAAGGAAATCTGTGTGCTGGCTGGCTTCTGTAATGAGGTCAAGAGAGTGCCAATG  
 AAGACTCTGGTCCCTGCCACCGAGACCTTAAGAACATCCTCCCTGCCCTGGAGATGATGGACCCCTATG  
 AGCAGAATCTGGTCCAGGCCACAATGTGATTTATGCCAGACCTGTGAGTTTGTGATGAATAAGTTTTTC  
 TGAGCTGATTGTCAATAATGCCACTGAGGAGCTCCTAGTTAAAGGTTTGGACAACGCATGCCACTGCTC  
 CCCGATCTGCCAGAACAAGTCCAGGAGGTGGTGGGAACATTTGGCCCTCCCTGTTGGACATCTTTA  
 TCCATGAGGTAACCCAGCTCTCTGTGGGTGTGATCGGCCCTCTGTGCTGCCCGCCGGAGTTGGTGGTA  
 GGCACTTGAGCAGCTGCGCCAGCCATTGTATCTGCACTGCTCAAAGAGCCACACCGCCAAGCAGCC  
 GCACAGCCCAAGCAGTCCGCAATTGCCCGCCATGTGCCTCCTCAGAAGAATGGTGGTCTGTGAGGTGT  
 GCAAGAACTGGTCTCTATTTGGAACATAACCTGGAGAAAAACAGCACCAAGGAGGAAATCCTGGCCGC  
 ACTTGAGAAGGGCTGCAGCTTCTGCCAGACCCTTACCAGAAGCAGTGGATGACTTTGTGGCTGAGTAT  
 GAGCCCTTGCTATTGGAGATCCTCGTGAAGTGTGGATCCTGGATTTGTGTGCTCGAAAATGGAGTTT  
 GCCCTTCTGCCTATAAGCTGCTGCTGGAAACCGAGAAGTGTGCTGGGCCCTAGCTACTGGTGTGAGAA  
 CATGGAGACTGCCGCCGATGCAATGCTGTCGATCATTGCAAACGCCATGTGTGGAAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR227325 representing NM\_001146122  
 Red=Cloning site Green=Tags(s)

MYALALFASLLATALTSPVQDPKTCSSGSAVLCRDVKTAVDCGAVKHCQQMVWSKPTAKSLPCDICKTVV  
 TEAGNLLKDNATQEEILHYLEKTCEWIHDSSLASCKEVVDSYLPVILDMIKGEMSNPGEVCSALNLCQS  
 LQEYLAEQNQKQLESNKIPEVDMARVVAPFMSNIPLLLYPQDHPRSQPQPKANEDVQCQCMKLVSDVQTA  
 VKTNSSFIQGFVDHVKEDCDRLGPGVSDICKNYVDQYSEVQVQMLMHMDQOPKEICVLAGFCNEVKRVP  
 KTLVPATETIKNILPALEMMDPYEQNLVQAHNVILCQTCQFVMNKFSELI VNNATEELLVKGLSNACALL  
 PDPARTKCQEVVGTFGPSLLDIFIHEVNPSSLCGVIIGLCAARPELVEALEQPAPAIVSALLKEPTPPKQP  
 AQPQKQALPAHVPPQKNGGFCEVCKKLVLYLEHNLEKNSTKEEILAALEKGSFLPDPYQKQCDDFVAEY  
 EPLLEILVEVMDPGFVCSKIGVCSAYKLLLGTGTEKCVWGPSYWCQNMETAARCNAVHDHCKRHVWN

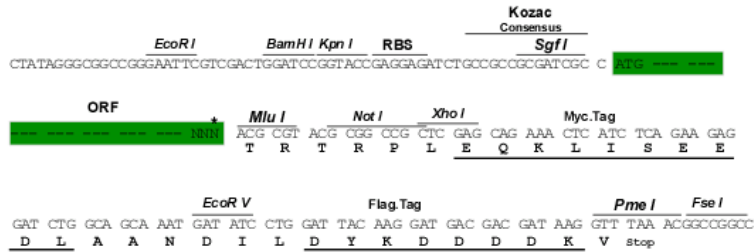
**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

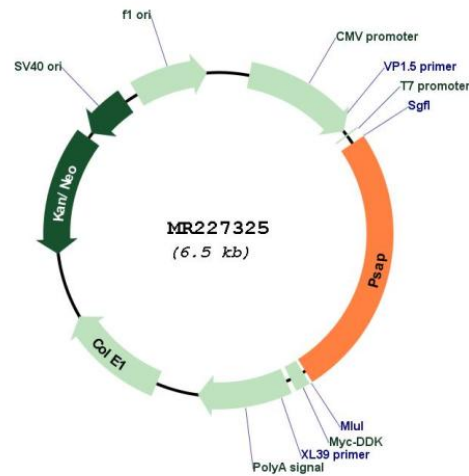
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001146122
<b>ORF Size:</b>	1659 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001146122.1</a> , <a href="#">NP_001139594.1</a>
<b>RefSeq Size:</b>	2664 bp
<b>RefSeq ORF:</b>	1662 bp
<b>Locus ID:</b>	19156
<b>UniProt ID:</b>	<a href="#">Q61207</a>
<b>Cytogenetics:</b>	10 30.02 cM
<b>MW:</b>	61.4 kDa
<b>Gene Summary:</b>	This gene encodes a multifunctional glycoprotein that plays a role in the intracellular metabolism of various sphingolipids or secreted into the plasma, milk or cerebrospinal fluid. The encoded protein undergoes proteolytic processing to generate four different polypeptides known as saposin A, B, C or D, that are required for the hydrolysis of certain sphingolipids by lysosomal hydrolases. Alternately, the encoded protein is secreted into body fluids where it exhibits neurotrophic and myelinotrophic activities. A complete lack of the encoded protein is fatal to mice either at the neonatal stage or within the first month due to severe leukodystrophy and sphingolipid accumulation. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate the mature saposins. [provided by RefSeq, Sep 2015]