

## Product datasheet for **MG227327**

### Psap (NM\_001146123) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Psap (NM_001146123) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Psap
Synonyms:	AI037048; SGP; SGP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG227327 representing NM\_001146123  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTACGCCCTCGCCCTCTTCGCCAGCCTTCTGGCCACCCTCTGACCAGCCCTGTCCAAGACCCGAAGA  
 CATGCTCTGGGGCTCAGCAGTCTGTGCAGAGATGTGAAGACGGCGGTGGACTGTGGGGCCGTGAAGCA  
 CTGCCAGCAGATGGTCTGGAGCAAGCCACAGCGAAATCCCTTCCTTGGACATATGCAAAACTGTTGTC  
 ACCGAAGCTGGAACTTCTGAAAGATAATGCTACGCAGGAGGAGATCCTTCATTACCTGGAGAAGACCT  
 GTGAGTGGATTACGACTCCAGCCTGTCGGCCTCGTGCAAGGAGGTGGTTGACTCTTACCTGCCTGTCAT  
 CCTGGACATGATTAAGGGCGAGATGAGCAACCTGGGGAAGTGTGCTCTGCGCTCAACCTCTGCCAGTCC  
 CTTCAGGAGTACTGGCCGAGCAAAACCAGAAACAGCTTGAGTCCAACAAGATCCCGAGGTGGACATGG  
 CCCGTGTGGTTGCCCCCTCATGTCCAACATCCCTCTCCTGCTGTACCCTCAGGATACCCCCGCAGCCA  
 GCCCAACCTAAGGCTAACGAGGACGTCTGCCAGGACTGTATGAAGCTGGTGTCTGATGTCCAGACTGCT  
 GTGAAGACCAACTCCAGCTTTATCCAGGGCTTCGTGGACCACGTGAAGGAGGATTGTGACCGCTTGGGGC  
 CAGGCGTGTCTGACATATGCAAGAACTACGTGGACCAGTATTCCGAGCAACCCAAGGAAATCTGTGTGCT  
 GGCTGGCTTCTGTAATGAGGTCAAGAGAGTGCCAAATGAAGACTCTGGTCCCTGCCACCGAGACCATTAAG  
 AACATCCTCCCTGCCCTGGAGATGATGGACCCCTATGAGCAGAATCTGGTCCAGGCCACAATGTGATTT  
 TATGCCAGACCTGTCAGTTTGTGATGAATAAGTTTTCTGAGCTGATTGTCAATAATGCCACTGAGGAGCT  
 CCTAGTTAAAGGTTTGTGCAACGCATGCCACTGCTCCCCGATCCTGCCAGAACCAAGTCCAGGAGGTG  
 GTGGGAACATTTGGCCCTCCCTGTTGGACATCTTTATCCATGAGGTAACCCAGCTCTCTGTGCGGTG  
 TGATCGGCCTCTGTGCTGCCCGCCGGAGTTGGTGGAGGCACTTGAGCAGCCTGCCAGCCATTGTATC  
 TGCACTGCTCAAAGAGCCACACCGCCAAGCAGCCCGCACAGCCCAAGCAGTCGGCATTGCCCGCCCAT  
 GTGCCCTCAGAGAATGGTGGTTCTGTGAGGTGTGCAAGAACTGGTCCCTCTATTTGGAACATAACC  
 TGGAGAAAAACAGCACCAAGGAGGAAATCCTGGCCGCACTTGAGAAGGGCTGCAGCTTCTGCCAGACCC  
 TTACCAGAAGCAGTGGATGACTTTGTGGCTGAGTATGAGCCCTTGTATTGGAGATCCTCGTGAAGTG  
 ATGGATCTGGATTTGTGTGCTCGAAAATTGGAGTTTGCCTTCTGCCTATAAGCTGCTGCTGGAAACCG  
 AGAAGTGTGCTGGGGCCCTAGCTACTGGTGTGAGAATGGAGACTGCCGCCGATGCAATGCTGTGCA  
 TCATTGCAAACGCCATGTGTGGAAC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG227327 representing NM\_001146123  
 Red=Cloning site Green=Tags(s)

MYALALFASLLATALTSPVQDPKTCSSGSAVLCRDVKTAVDCGAVKHCQQMVWSKPTAKSLPCDICKTVV  
 TEAGNLLKDNATQEEILHYLEKTCEWIHDSLSASCKEVVDSYLPVILDMIKGEMSNPGEVCSALNLCQS  
 LQEYLAEQNQKQLESNKIPEVDMARVVAFMNSIPLLLYPQDHPRSQPQPKANEDVQCDCMKLVSDVQTA  
 VKTNSSFIQGFVDHVKEDCDRLGPGVSDICKNYVDQYSEQPKIICVLAGFCNEVKRVPMKTLVPATETIK  
 NILPALEMMPYEQNLVQAHNVILCQTCQFVMNKFSELI VNNATEELLVKGLSNACALLPDPARTKQEV  
 VGTFFGPSLLDIFIHEVNPSSLCGVIGLCAARPELVEALEQPAPAIVSALLKEPTPPKQPAQPKQSALPAH  
 VPPQKNGGFCEVCKKLVLYLEHNLEKNSTKEEILAALEKGSFLPDYQKQCDDFVAEYEP L L L L E I L V E V  
 MDPGFVCSKIGVCP SAYK L L L L G T E K C V W G P S Y W C Q N M E T A A R C N A V D H C K R H V W N

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001146123

**ORF Size:** 1635 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. [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:** [NM\\_001146123.1](#), [NP\\_001139595.1](#)

**RefSeq Size:** 2640 bp

**RefSeq ORF:** 1638 bp

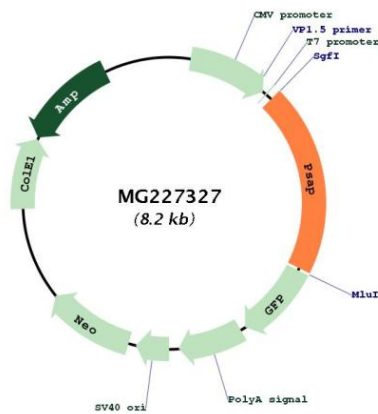
**Locus ID:** 19156

**UniProt ID:** [Q61207](#)

**Cytogenetics:** 10 30.02 cM

**Gene Summary:** 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]

**Product images:**



Circular map for MG227327