

Product datasheet for **MG227325**

Psap (NM_001146122) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Psap (NM_001146122) 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) |



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ORF Nucleotide Sequence:

>MG227325 representing NM_001146122
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTACGCCCTCGCCCTCTTCGCCAGCCTTCTGGCCACCCTCTGACCAGCCCTGTCCAAGACCCGAAGA
 CATGCTCTGGGGCTCAGCAGTCTGTGCAGAGATGTGAAGACGCGGGTGGACTGTGGGGCGTGAAGCA
 CTGCCAGCAGATGGTCTGGAGCAAGCCACAGCGAAATCCCTTCCTTGGACATATGCAAACTGTTGTC
 ACCGAAGCTGGAACTTCTGCTGAAAGATAATGCTACGCAGGAGGAGATCCTTACCTGGAGAAGACCT
 GTGAGTGGATTATGACTCCAGCCTGTCCGGCTCGTGCAAGGAGGTGGTTGACTCTTACCTGCCTGTCAT
 CCTGGACATGATTAAGGGCGAGATGAGCAACCTGGGGAAGTGTGCTCTGCGCTCAACCTCTGCCAGTCC
 CTTCAGGAGTACTTGGCCGAGCAAAACCAGAAACAGCTTGAGTCCAACAAGATCCCGAGGTGGACATGG
 CCCGTGTGGTTGCCCTTCATGTCCAACATCCCTCTCCTGCTGTACCCTCAGGATCACCCCGCAGCCA
 GCCCAACCTAAGGCTAACGAGGACGTCTGCCAGGACTGTATGAAGCTGGTGTCTGATGTCCAGACTGCT
 GTGAAGACCAACTCCAGCTTTATCCAGGGCTTCGTGGACCACGTGAAGGAGGATTGTGACCGCTTGGGGC
 CAGGCGTGTCTGACATATGCAAGAACTACGTGGACCAGTATTCCGAGGTCTGTGTCCAGATGTTGATGCA
 CATGGATCAGCAACCAAGGAAATCTGTGTGCTGGCTGGCTTCTGTAATGAGGTCAAGAGAGTGCCAATG
 AAGACTCTGGTCCCTGCCACCGAGACCATTAAGAACATCCTCCCTGCCCTGGAGATGATGGACCCCTATG
 AGCAGAATCTGGTCCAGGCCACAATGTGATTTATGCCAGACCTGTGAGTTTGTGATGAATAAGTTTTTC
 TGAGCTGATTGTCAATAATGCCACTGAGGAGCTCCTAGTTAAAGTGTGAGCAACGCATGCCACTGCTC
 CCCGATCTGCCAGAACAAGTCCAGGAGGTGGTGGGAACATTTGGCCCTCCCTGTTGGACATCTTTA
 TCCATGAGGTAACCCAGCTCTCTGTGCGGTGTGATCGGCCCTCTGTGCTGCCCGCCGGAGTTGGTGGA
 GGCACTTGAGCAGCCTGCGCCAGCCATTGTATCTGCACTGCTCAAAGAGCCACACCGCCAAAGCAGCCC
 GCACAGCCCAAGCAGTCCGCATTGCCGCCCATGTGCCTCCTCAGAAGAATGGTGGTCTGTGAGGTGT
 GCAAGAACTGGTCTCTATTTGGAACATAACCTGGAGAAAAACAGCACCAAGGAGGAAATCCTGGCCGC
 ACTTGAGAAGGGCTGCAGCTTCTGCCAGACCCTTACCAGAAGCAGTGGATGACTTTGTGGCTGAGTAT
 GAGCCCTTGCTATTGGAGATCCTCGTGAAGTGTGGATCCTGGATTTGTGTGCTCGAAAATTGGAGTTT
 GCCCTTCTGCCTATAAGCTGCTGCTGGGAACCGAGAAGTGTGCTGGGCCCTAGCTACTGGTGTGAGAA
 CATGGAGACTGCCGCCGATGCAATGCTGTCGATCATTGCAAACGCCATGTGTGGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227325 representing NM_001146122
 Red=Cloning site Green=Tags(s)

MYALALFASLLATALTSPVQDPKTCSSGSAVLCRDVKTAVDCGAVKHCQQMVWSKPTAKSLPCDICKTVV
 TEAGNLLKDNATQEEILHYLEKTCEWIHSSLSASCKEVVDSYLPVILDMIKGEMSNPGEVCSALNLCQS
 LQEYLAEQNQKQLESNKIPEVDMARVVAFMFSNIPLLL YPQDHPRSQPQPKANEDVCQDCMKLVSDVQTA
 VKTNSSFIQGFVDHVKEDCDRLGPGVSDICKNYVDQYSEVCVQMLMHMDQQPKEICVLAGFCNEVKRVP
 KTLVPAETETIKNILPALEMMDPYEQLVQAHNVILCQTCQFVMNKFSELIVNNAATELLVKGLSNACALL
 PDPARTKCQEVVGTGFPSSLDIFIHEVNPSSLCGVIGLCAARPELVEALEQPAPAIVSALLKEPTPPKQP
 AQPQKQALPAHVPPQKNGGFCEVCKKLVLYLEHNLEKNSTKEEILAALEKGSFLPDYQKQCDDFVAEY
 EPLLEILVEVMDPGFVCSKIGVCPKLLLGTEKCVWGPSYWCQNMETAARCAVNDHCKRHVWN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001146122

ORF Size: 1659 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_001146122.1](#), [NP_001139594.1](#)

RefSeq Size: 2664 bp

RefSeq ORF: 1662 bp

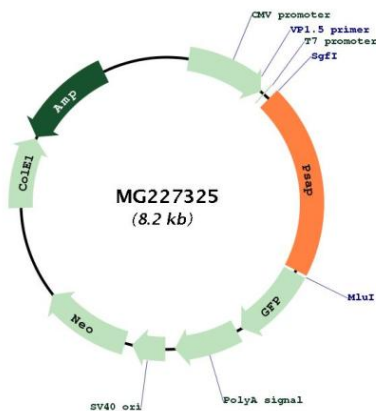
Locus ID: 19156

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 MG227325