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Product datasheet for RG203555

PSAP (NM_002778) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSAP (NM_002778) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSAP
Synonyms:	GLBA; SAP1; SAP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG203555 representing NM_002778
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACGCCCTCTTCCTCCTGGCCAGCCTCCTGGGCGCGGCTCTAGCCGGCCCGGTCCTTGGACTGAAAG
AATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGACGGCGTCCGACTGCGGGGCAGTGAAGCA
CTGCCTGCAGACCGTTTGGAACAAGCCAACAGTGAAATCCCTTCCCTGCGACATATGCAAAGACGTTGTC
ACCGCAGCTGGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTGTTTACTTGGAGAAGACCT
GTGACTGGCTTCCGAAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCTACCTCCCTGTCAT
CCTGGACATCATTAAAGGAGAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCTGCGAGTCT
CTCCAGAAGCACCTAGCAGAGCTGAATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGGACA
TGACTGAGGTGGTGGCCCCCTTCATGGCCAACATCCCTCTCCTCCTCTACCCTCAGGACGGCCCCCGCAG
CAAGCCCCAGCCAAAGGATAATGGGGACGTTTGCCAGGACTGCATTCAGATGGTGACTGACATCCAGACT
GCTGTACGGACCAACTCCACCTTTGTCCAGGCCTTGGTGGAACATGTCAAGGAGGAGTGTGACCGCCTGG
GCCCTGGCATGGCCGACATATGCAAGAACTATATCAGCCAGTATTCTGAAATTGCTATCCAGATGATGAT
GCACATGCAACCCAAGGAGATCTGTGCGCTGGTTGGGTTCTGTGATGAGGTGAAAGAGATGCCCATGCAG
ACTCTGGTCCCCGCCAAAGTGGCCTCCAAGAATGTCATCCCTGCCCTGGAACTGGTGGAGCCCATTAAGA
AGCACGAGGTCCCAGCAAAGTCTGATGTTTACTGTGAGGTGTGTGAATTCCTGGTGAAGGAGGTGACCAA
GCTGATTGACAACAACAAGACTGAGAAAGAAATACTCGACGCTTTTGACAAAATGTGCTCGAAGCTGCCG
AAGTCCCTGTCGGAAGAGTGCCAGGAGGTGGTGGACACGTACGGCAGCTCCATCCTGTCCATCCTGCTGG
AGGAGGTCAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCTGCTCTGGCACGCGGCTGCCTGCACTGAC
CGTTCACGTGACTCAGCCAAAGGACGGTGGCTTCTGCGAAGTGTGCAAGAAGCTGGTGGGTTATTTGGAT
CGCAACCTGGAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGAAAGGCTGCAGCTTCCTGC
CAGACCCTTACCAGAAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGCTGATCGAGATCCTGGT
GGAGGTGATGGATCCTTCCTTCGTGTGCTTGAAAATTGGAGCCTGCCCCTCGGCCCATAAGCCCTTGTTG
GGAACTGAGAAGTGTATATGGGGCCCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCCAGTGCAATG
CTGTCGAGCATTGCAAACGCCATGTGTGGAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

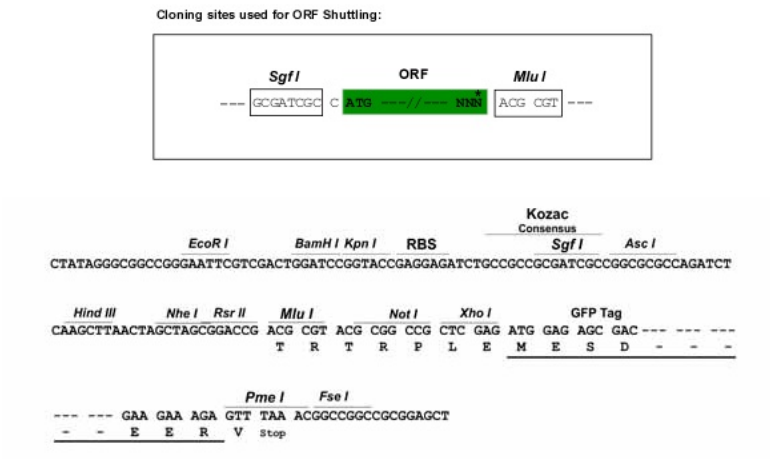
>RG203555 representing NM_002778
Red=Cloning site Green=Tags(s)

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSLPCDICKDVV
TAAGDMLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDIIKGEMSRPGEVCSALNLCES
LQKHLAELNHQKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQT
AVRTNSTFVQALVEHVKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQ
TLVPAKVASKNVIPALELVEPIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDAFDKMCSKLP
KSLSEECQEVVDTYGSSILSILLEEVSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLD
RNLEKNSTKQEILAALEKGCSFLPDPYQKQCDQFVAEYEPVLIEILVEVMDPSFVCLKIGACPSAHKPLL
GTEKCIWGPSYWCQNTETAAQCNAVEHCKRHVWN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_002778
ORF Size:	1572 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_002778.4
RefSeq Size:	2839 bp
RefSeq ORF:	1575 bp
Locus ID:	5660
UniProt ID:	P07602
Cytogenetics:	10q22.1

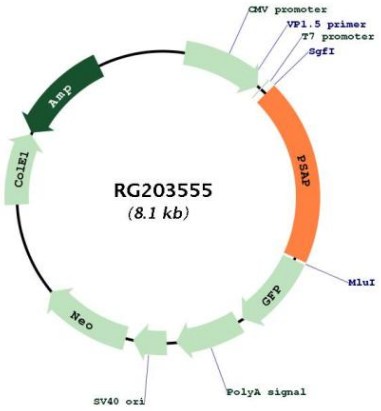
Domains: SAPA, SapB_1, SapB_2, SAPB

Protein Families: Druggable Genome

Protein Pathways: Lysosome

Gene Summary: This gene encodes a highly conserved preproprotein that is proteolytically processed to generate four main cleavage products including saposins A, B, C, and D. Each domain of the precursor protein is approximately 80 amino acid residues long with nearly identical placement of cysteine residues and glycosylation sites. Saposins A-D localize primarily to the lysosomal compartment where they facilitate the catabolism of glycosphingolipids with short oligosaccharide groups. The precursor protein exists both as a secretory protein and as an integral membrane protein and has neurotrophic activities. Mutations in this gene have been associated with Gaucher disease and metachromatic leukodystrophy. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RG203555