

Product datasheet for **RC224645**

Phosphoserine Aminotransferase (PSAT1) (NM_021154) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phosphoserine Aminotransferase (PSAT1) (NM_021154) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSAT1
Synonyms:	EPIP; NLS2; PSA; PSAT; PSATD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC224645 representing NM_021154 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGGACGCCCCAGGCAGGTGGTCAACTTTGGGCTGGTCCCGCAAGCTGCCGCACTCAGTGTTGTTAG
AGATACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTCTTGAAATGAGTCACAGGTCATC
AGATTTTGCCAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACTAT
AAGGTGATTTTTCTGCAAGGAGGTGGGTGCGGCCAGTTCAGTGTGTCCCTTAAACCTCATTGGCTTGA
AAGCAGGAAGGTGTGCTGACTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGAGAAGAAGCCAAGAA
GTTTGGGACTATAAATATCGTTCACCCTAAACTTGGGAGTTATACAAAAATCCAGATCCAAGCACCTGG
AACCTCAACCCAGATGCCTCCTACGTGTATTATTGCGCAAATGAGACGGTGATGGTGTGGAGTTTGACT
TTATACCCGATGTCAAGGAGCAGTACTGGTTTGTGACATGTCCTCAAACCTCCTGTCCAAGCCAGTGGA
TGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCGAGAAGAATGTTGGCTCTGCTGGGGTCACCGTGGTG
ATTGTCGTGATGACCTGCTGGGTTTGCCTCCGAGAGTGCCCTCGTCTGGAATACAAGGTGCAGG
CTGGAAACAGCTCCTTGTACAACACGCCCTCCATGTTTCAGCATCTACGTATGGGCTTGGTTCTGGAGTG
GATTAACAAATGAGAGGTGCCGCGCCATGGAGAAGCTTAGCTCCATCAAATCTCAAACAATTTATGAG
ATTATTGATAATTCTCAAGGATTCTACGTGTCTGTGGGAGGCATCCGGGCTCTCTGTATAATGCTGTCA
CAATTGAAGACGTTCAGAAGCTGGCCGCTTCATGAAAAATTTTGGAGATGCATCAGCTA

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



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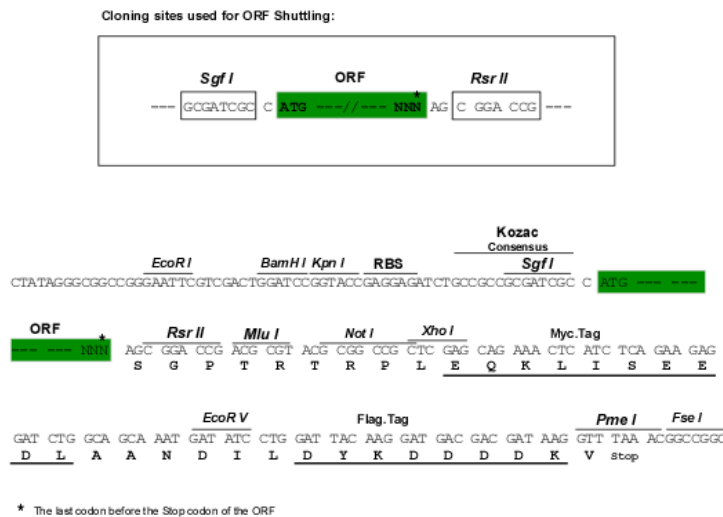
Protein Sequence: >RC224645 representing NM_021154
Red=Cloning site Green=Tags(s)

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGIVLEMSHRSSDFAKIINNTENLVRELLAVPDNY
 KVI FLQGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLSYTKIPDPSTW
 NLNPDASYVYYCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQNKVGSAAGTVV
 IVRDILLGFALRECPSVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGAAAMEKLSIKSQTIIYE
 IIDNSQGFVYVSGGIRASLYNAVTIEDVQKLAAFMKKFLEMHQL

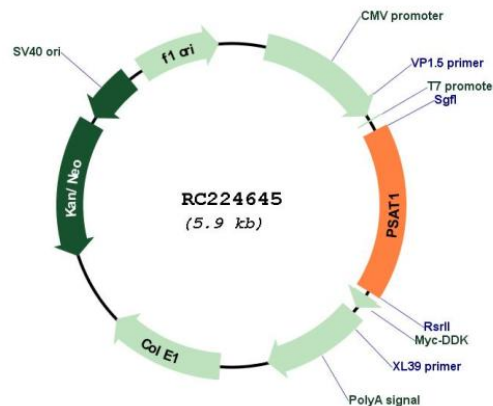
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_021154

ORF Size: 972 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:	<ol style="list-style-type: none">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_021154.5
RefSeq Size:	2083 bp
RefSeq ORF:	975 bp
Locus ID:	29968
UniProt ID:	Q9Y617
Cytogenetics:	9q21.2
Domains:	aminotran_5
Protein Pathways:	Glycine, serine and threonine metabolism, Metabolic pathways, Vitamin B6 metabolism
MW:	35 kDa
Gene Summary:	This gene encodes a member of the class-V pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is a phosphoserine aminotransferase and decreased expression may be associated with schizophrenia. Mutations in this gene are also associated with phosphoserine aminotransferase deficiency. Alternative splicing results in multiple transcript variants. Pseudogenes of this gene have been defined on chromosomes 1, 3, and 8. [provided by RefSeq, Jul 2013]