

Product datasheet for **RG210359**

Serine racemase (SRR) (NM_021947) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Serine racemase (SRR) (NM_021947) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Serine racemase
Synonyms:	ILV1; ISO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210359 representing NM_021947 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGTGCTCAGTATTGCATCTCCTTTGCTGATGTTGAAAAAGCTCATATCAACATTCGAGATTCTATCC
ACCTCACACCAGTGCTAACAAAGCTCCATTTTGAATCAACTAACAGGGCGCAATCTTTTCTCAAATGTGA
ACTCTCCAGAAAACAGGATCTTTAAGATTCGTGGTCTCTCAATGCCGTCAGAAGCTTGGTTCCTGAT
GCTTTAGAAAAGGAAGCCGAAAGCTGTTGTTACTCACAGCAGTGGAAACCATGGCCAGGCTCTCACCTATG
CTGCCAAATTGGAAGGAATTCCTGCTTATATTGGTGGCCAGACAGCTCCAGACTGTAAAAAAGTTGC
AATACAAGCCTACGGAGCGTCAATTGTATACTGTGAACCTAGTGATGAGTCCAGAGAAAAATGTTGAAAA
AGAGTTACAGAAGAAACAGAAGGCATCATGGTACATCCCAACCAGGAGCCTGCAGTGATAGCTGGACAAG
GGACAATTGCCCTGGAAGTGCTGAACAGGTTCCCTTTGGTGGATGCACTGGTGGTACCTGTAGGTGGAGG
AGGAATGCTTGCTGGAATAGCAATTACAGTTAAGGCTCTGAAACCTAGTGTGAAGGTATATGCTGCTGAA
CCCTCAAATGCAGATGACTGCTACCAGTCCAAGCTGAAGGGGAAACTGATGCCCAATCTTTATCCTCCAG
AAACCATAGCAGATGGTGTCAAATCCAGCATTGGCTTGAACACCTGGCCTATTATCAGGGACCTTGTGGA
TGATATCTTCACTGTACAGAGGATGAAATTAAGTGTGCAACCCAGCTGGTGTGGGAGAGGATGAAACTA
CTCATTGAACCTACAGCTGGTGTGGAGTGGCTGCTGTCTCAACATTTTCAAAGTGTTCCTCCAG
AAGTAAAGAACATTTGTATTGTGCTCAGTGGTGGAAATGTAGACTTAACCTCCTCATAAAGTGGGTGAA
GCAGGCTGAAAGGCCAGCTTCTTATCAGTCTGTTTCTGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG210359 representing NM_021947
Red=Cloning site Green=Tags(s)

MCAQYICISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFFKCELFQKTGSFKIRGALNAVRSLVDP
 ALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQTAPDCKKLAIQAYGASIVYCEPSDESRENVAK
 RVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGGMLAGIAITVKALKPSVKVYAAE
 PSNADDCYQSKLKGKLMPNLYPPETIADGVKSSIGLNTWPIIRDLVDDIFVTVEDEIKCATQLVWERMKL
 LIEPTAGVGVAAVLSQHFQTVSPEVKNICIVLSGGNVDLTSSITWVKQERPASYQSVSV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021947

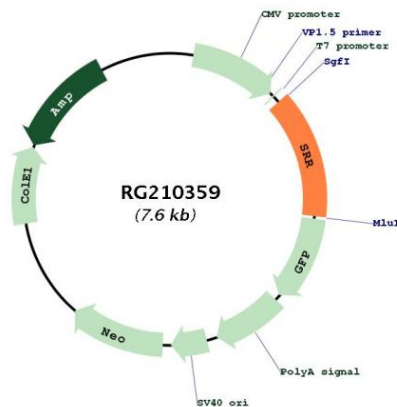
ORF Size: 1020 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<u>NM_021947.3</u>
RefSeq Size:	2477 bp
RefSeq ORF:	1023 bp
Locus ID:	63826
UniProt ID:	<u>Q9GZT4</u>
Cytogenetics:	17p13.3
Domains:	PALP
Protein Pathways:	Glycine, serine and threonine metabolism
Gene Summary:	Catalyzes the synthesis of D-serine from L-serine. D-serine is a key coagonist with glutamate at NMDA receptors. Has dehydratase activity towards both L-serine and D-serine. [UniProtKB/Swiss-Prot Function]

Product images:


Circular map for RG210359