

Product datasheet for RC204156L4

Superoxide Dismutase 3 (SOD3) (NM_003102) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Superoxide Dismutase 3 (SOD3) (NM_003102) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Superoxide Dismutase 3
Synonyms:	EC-SOD
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC204156).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_003102
ORF Size:	720 bp



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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:

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_003102.2](#), [NP_003093.1](#)

RefSeq Size: 1546 bp

RefSeq ORF: 723 bp

Locus ID: 6649

UniProt ID: [P08294](#)

Cytogenetics: 4p15.2

Domains: sodcu

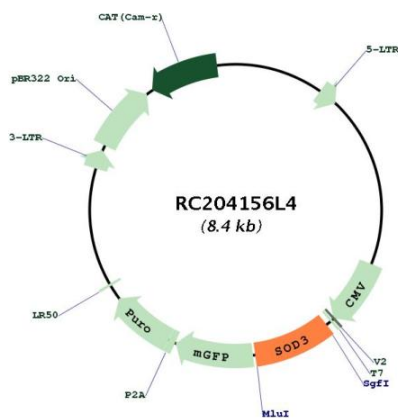
Protein Families: Druggable Genome, Secreted Protein

MW: 25.9 kDa

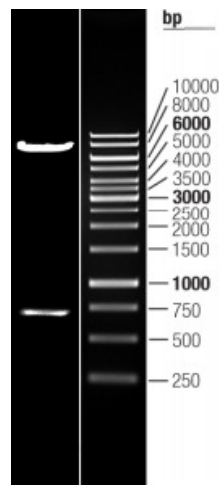
Gene Summary:

This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the conversion of superoxide radicals into hydrogen peroxide and oxygen, which may protect the brain, lungs, and other tissues from oxidative stress. Proteolytic processing of the encoded protein results in the formation of two distinct homotetramers that differ in their ability to interact with the extracellular matrix (ECM). Homotetramers consisting of the intact protein, or type C subunit, exhibit high affinity for heparin and are anchored to the ECM. Homotetramers consisting of a proteolytically cleaved form of the protein, or type A subunit, exhibit low affinity for heparin and do not interact with the ECM. A mutation in this gene may be associated with increased heart disease risk. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RC204156L4



Double digestion of RC204156L4 using SgfI and MluI