

Product datasheet for **RR203063**

Selenok (NM_207589) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Selenok (NM_207589) Rat Tagged ORF Clone
Symbol: Selenok
Synonyms: Selk
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR203063 representing NM_207589
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTTACATCTCGAATGGTCAGGTGTTAGACAGCCGGAATCAGTCCCCCTGGAGATTGTCTTTCATAA
CAGATTTCTTCTGGGAATAGCAGAATTTGTGGTTTTTTTTTTTCAAACCTGCTTCAGCAAGATGTGAA
GAAAAGAAGAGGCTACGGGGCTCCTCTGATTCCAGATATGATGACGGAAGAGGGCCACCAGGAAACCT
CCACGAAGAATGGGTCGGATCAGTCACCTTCGTGGCCCCAGCCCTCCTCCAATGGCCGGTGGATGAGGAA
GG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR203063 representing NM_207589
Red=Cloning site Green=Tags(s)

MVYISNGQVLDSRNQSPWRLSFITDFFWGIAEFVVFVKTLQDVKRRGYGGSSDSRYDDGRGPPGNP
PRRMGRISHLRGPPPMAGG*GR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul



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Cloning Scheme:



ACCN: NM_207589

ORF Size: 282 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](#) The expression of this clone is not guaranteed due to the nature of selenoproteins.

OTI Annotation: This clone encodes a selenoprotein containing the rare amino acid selenocysteine (Sec). Sec is encoded by UGA codon, which normally signals translational termination. Expression of this clone is not guaranteed due to the nature of selenoproteins.

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:

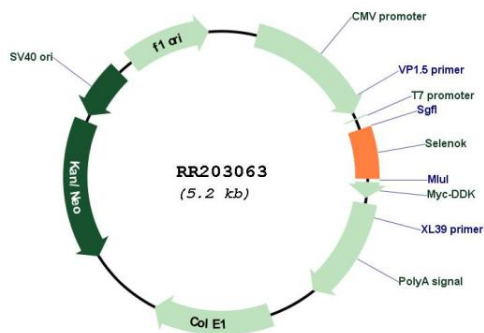
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_207589.4](#)

RefSeq Size: 752 bp
 RefSeq ORF: 285 bp
 Locus ID: 290549
 UniProt ID: [P59798](#)
 Cytogenetics: 16p16
 MW: 10.6 kDa

Gene Summary: The protein encoded by this gene belongs to the selenoprotein K family. It is a transmembrane protein that is localized in the endoplasmic reticulum (ER), and is involved in ER-associated degradation (ERAD) of misfolded, glycosylated proteins. It also has a role in the protection of cells from ER stress-induced apoptosis. Knockout studies in mice show the importance of this gene in promoting Ca(2+) flux in immune cells and mounting effective immune response. This protein is a selenoprotein, containing the rare amino acid selenocysteine (Sec). Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. Multiple pseudogenes of this locus have been identified. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RR203063