

Product datasheet for **RG203754**

SELK (SELENOK) (NM_021237) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Symbol: SELK

Synonyms: HSPC030; HSPC297; SELK

Mammalian Cell Selection: Neomycin

Vector: pCMV6-AC-GFP (PSI00010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG203754 representing NM_021237
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGTTTACATCTCGAACGGACAAGTGTGGACAGCCGGAGTCAGTCTCCATGGAGATTATCTTTGATAA
CAGATTCTTCTGGGAATAGCTGAGTTTGTGGTTTTGTTTTCAAACCTCTGCTTCAGCAAGATGTGAA
AAAAAGAAGAAGCTATGGAACTCATCTGATTCCAGATATGATGATGGAAGAGGGCCACCAGGAAACCCT
CCCCGAAGAATGGGTAGAATCAATCATCTGCGTGGCCCTAGTCCCCCTCCAATGGCTGGTGGATGAGGAA
GG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203754 representing NM_021237
Red=Cloning site Green=Tags(s)

MYVISNGQVLDSRSQSPWRLSLITDFFWGIAEFVVLFFKTLQDVKRRSYGNSSDSRYDDGRGPPGNP
PRRMGRINHLRGPSPPPMAGG*GR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:



ACCN: NM_021237

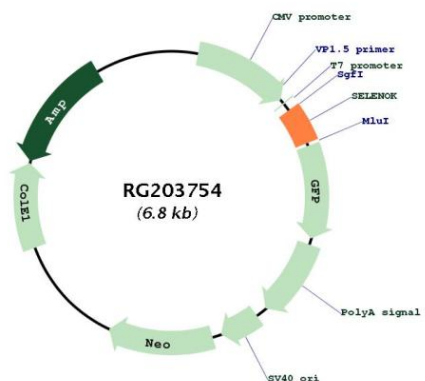
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_021237.5</u>
RefSeq Size:	832 bp
RefSeq ORF:	285 bp
Locus ID:	58515
UniProt ID:	<u>Q9Y6D0</u>
Cytogenetics:	3p21.1
Protein Families:	Transmembrane
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. Pseudogenes of this locus have been identified on chromosomes 6 and 19.[provided by RefSeq, Aug 2017]

Product images:



Circular map for RG203754