OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG205490

SELT (SELENOT) (NM_016275) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SELT (SELENOT) (NM_016275) Human Tagged ORF Clone
Symbol:	SELT
Synonyms:	SELT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG205490 representing NM_016275
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGCTTCTGCTGCTTCTCCTAGTGGCGGCGTCTGCGATGGTCCGGAGCGAGGCCTCGGCCAATCTGG
GCGGCGTGCCCAGCAAGAGATTAAAGATGCAGTACGCCACGGGGCCGCTGCTCAAGTTCCAGATTTGTGT
TTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACATGCGGGTTATTAGCCAGCGGTACCCAGACATCCGC
ATTGAAGGAGAGAATTACCTCCCTCAACCAATATATAGACACATAGCATCTTTCCTGTCAGTCTTCAAAC
TAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTTTCTTTGGCATGCAAGCTCCTAGCAT
CTGGCAGTGGGGCCAAGAAAATAAGGTTTATGCATGTATGATGGTTTTCTTCTTGAGCAACATGATTGAG
AACCAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGTGGTCTAAGCTGGAAT
CTGGTCACCTTCCATCCATGCAACAACTTGTTCAAATTCTTGACAATGAAATGAAGCTCAATGTGCATAT
GGATTCAATCCCACACCATCGATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG205490 representing NM_016275
Red=Cloning site Green=Tags(s)

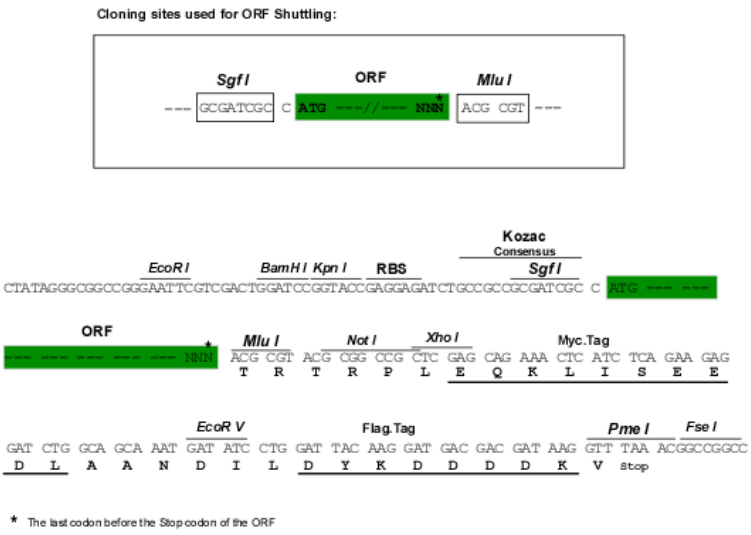
MRLLLLLLVAASAMVRSEASANLGGVPSKRLKMQYATGPLLKFQICVS*GYRRVFEEYMRVISQRYPDIR
IEGENYLPQPIYRHIASFLSVFKLVLIGLIIVGKDPFAFFGMQAPSIWQWGQENKVYACMMVFFLSNMIE
NQCMSTGAFEITLNDVPVWSKLESGHLPSMQQLVQILDNEMKLNVHMDSIPHHRS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_016275

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_016275.5

RefSeq Size: 3498 bp

RefSeq ORF: 588 bp

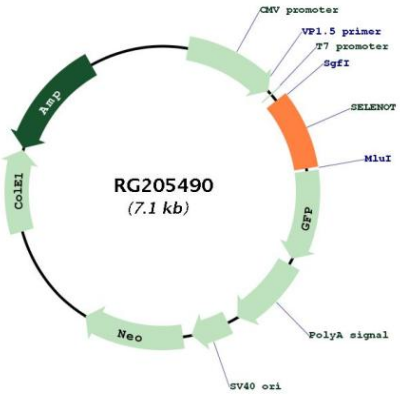
Locus ID: 51714

UniProt ID: P62341

Cytogenetics: 3q25.1

Gene Summary: This gene encodes a selenoprotein, containing a selenocysteine (Sec) residue at the active site. Sec is encoded by the UGA codon that normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. This protein is localized in the endoplasmic reticulum. It belongs to the SelWTH family that possesses a thioredoxin-like fold and a conserved CxxU (C is cysteine, U is Sec) motif found in several redox active proteins. Studies in mice indicate a crucial role for this gene in the protection of dopaminergic neurons against oxidative stress in Parkinson's disease, and in the control of glucose homeostasis in pancreatic beta-cells. Pseudogenes of this locus have been identified on chromosomes 9 and 5. [provided by RefSeq, Sep 2017]

Product images:



Circular map for RG205490