

# **Product datasheet for RG210475**

#### 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

OriGene Technologies, Inc.

## SELS (SELENOS) (NM\_203472) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: SELS (SELENOS) (NM\_203472) Human Tagged ORF Clone

Symbol: SELS

Synonyms: AD-015; ADO15; SBBI8; SELS; SEPS1; VIMP

Mammalian Cell Neomycin

Selection:

racorriyeni

**Vector:** pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG210475 representing NM\_203472

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**ATGAGGC** 

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG210475 representing NM\_203472

Red=Cloning site Green=Tags(s)

MERQEESLSARPALETEGLRFLHTTVGSLLATYGWYIVFSCILLYVVFQKLSARLRALRQRQLDRAAAAV EPDVVVKRQEALAAARLKMQEELNAQVEKHKEKLKQLEEEKRRQKIEMWDSMQEGKSYKGNAKKPQEEDS

PGPSTSSVLKRKSDRKPLRGGGYNPLSGEGGGACSWRPGRRGPSSGG\*G

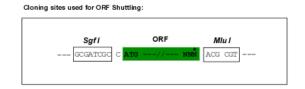
TRTRPLE - GFP Tag - V

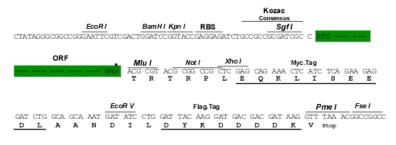
Restriction Sites: Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 203472

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: <u>NM 203472.1, NP 982298.1</u>

RefSeq Size: 1292 bp RefSeq ORF: 564 bp Locus ID: 55829



UniProt ID: Q9BQE4

Cytogenetics: 15q26.3

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a transmembrane protein that is localized in the endoplasmic reticulum

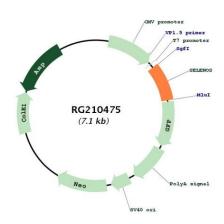
(ER). It is involved in the degradation process of misfolded proteins in the ER, and may also have a role in inflammation control. This protein is a selenoprotein, containing the rare amino acid selenocysteine (Sec). Sec is encoded by the UGA codon, which normally signals translation termination. The 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. Two additional

phylogenetically conserved stem-loop structures (Stem-loop 1 and Stem-loop 2) in the 3' UTR of this mRNA have been shown to function as modulators of Sec insertion. An alternatively spliced transcript variant, lacking the SECIS element and encoding a non-Sec containing shorter isoform, has been described for this gene (PMID:23614019). [provided by RefSeq, Jul

2017]

## **Product images:**



Circular map for RG210475