

Product datasheet for **RG216802**

SEC31A (NM_001077208) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SEC31A
Synonyms:	ABPI25; ABPI30; HSPC275; HSPC334; NEDSOSB; SEC31L1
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216802 representing NM_001077208
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTTAAAGGAAGTAGATCGTACAGCCATGCAGGCATGGAGCCCTGCCAGAATCACCCATTACC
TAGCAACAGGAACATCTGCTCAGCAATTGGATGCAACATTTAGTACGAATGCTTCCCTTGAGATATTTGA
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CCAATGTGGCTCTTAAAGACTCTGACCAAGTAGCACAGAGTGATGGGGAGGAGAGCCCTGCTGCTGAAGA
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CCAGTTCTCAAAGTTGTTCTCACCAGGCCAATAAGCTGGGTGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

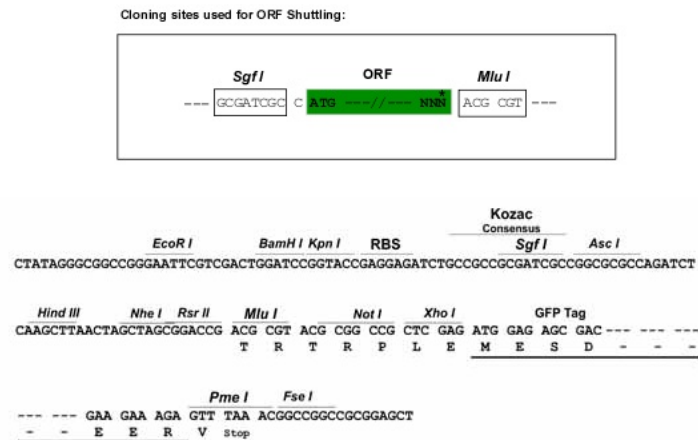
>RG216802 representing NM_001077208
Red=Cloning site Green=Tags(s)

MKLKEVDRTAMQAWSPAQNHPYIATGTSAAQQLDATFTSNASLEIFELDLSDPSLDMKSCATFSSSHRYH
KLIWGPYKMDSGDVSGVLIAGGENIILYDPSKIIAGDKEVVIAQNDKHTGPVRALDVNIFQTNLVA
GANESIIYIWDLNNFATPMTPGAQTQPPEDISCIAWNROVQHILASASPSGRATVWDLRKNEPIIKVSDH
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QQQHHVFISQVVEKEFLSRSDQLQAVQSQGFINYCQKKIDASQTEFEKNVWSFLKVNFEEDSRGKYL
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FNISVSGDIDGLITQALLTGNFESAVDLCLHDNRMADAILAIAGGQELLARTQKKYFAKSQSKITRLIT
AVVMKNWKEIVESCDLKNWREALAVALTYAKPDEF SALCDLLGTRLENEGDSSLTQACLCYICAGNVEK
LVACWTKAQDGSHPLSLQDLIEKVILRKAVQLTQAMDTSTVGVLAAKMSQYANLLAAQGSIAALAF
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VQQPLGQTGMPPSFSPKNIEGAPGAPIGNTFQHVQSLPTKKITKKPIPDEHLILKTTFEDLIQRCLSSAT
DPQTKRKLDDASKRLEFLYDKLREQTLSPITISGLHNIARSIETRYSEGLTMHTHIVSTSNFSETSAFM
PVLKVVLTQANKLGV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001077208

ORF Size: 3615 bp

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.

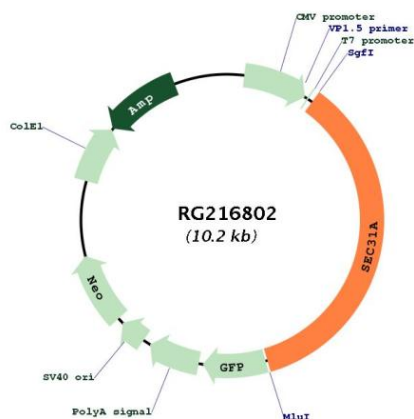
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001077208.3, NP_001070676.1</u>
RefSeq Size:	4199 bp
RefSeq ORF:	3618 bp
Locus ID:	22872
UniProt ID:	<u>O94979</u>
Cytogenetics:	4q21.22
Gene Summary:	The protein encoded by this gene shares similarity with the yeast Sec31 protein, and is a component of the outer layer of the coat protein complex II (COPII). The encoded protein is involved in vesicle budding from the endoplasmic reticulum (ER) and contains multiple WD repeats near the N-terminus and a proline-rich region in the C-terminal half. It associates with the protein encoded by the SEC13 homolog, nuclear pore and COPII coat complex component (SEC13), and is required for ER-Golgi transport. Monoubiquitylation of this protein by CUL3-KLHL12 was found to regulate the size of COPII coats to accommodate unusually shaped cargo. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG216802