

## Product datasheet for **RG223429**

### SEC31A (NM\_001077207) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                            |
| Product Name:             | SEC31A (NM_001077207) Human Tagged ORF Clone                                   |
| Tag:                      | TurboGFP                                                                       |
| Symbol:                   | SEC31A                                                                         |
| Synonyms:                 | ABP125; ABP130; HSPC275; HSPC334; NEDSOSB; SEC31L1                             |
| Mammalian Cell Selection: | Neomycin                                                                       |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                        |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                         |
| ORF Nucleotide Sequence:  | >RG223429 representing NM_001077207<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGAAGTTAAAGGAAGTAGATCGTACAGCCATGCAGGCATGGAGCCCTGCCAGAATCACCCATTAC  
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AAGTTGATTTGGGGCCTTATAAAATGGATTCCAAAGGAGATGTCTCTGGAGTTCTGATTGCAGGTGGT  
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AACTTCAGCAGGCTGTGAGTACAAGGATTTATCAATTATTGCCAAAAAAATTTGATGCTTCTCAGAC  
TGAATTTGAGAAAAATGTGTGGTCTTTTGAAGGTAACCTTTGAGGATGATTCTCGTGAAAAATACCTT



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GAACTTCTAGGATACAGAAAAGAAGATCTAGGAAAAGAAGATTGCTTTGGCCTTGAACAAAGTGGATGGAG  
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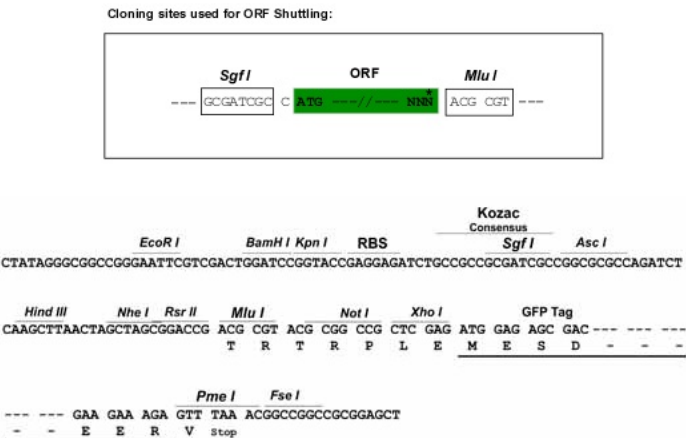
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG223429 representing NM\_001077207  
 Red=Cloning site Green=Tags(s)

MKLKEVDRTAMQAWSPAQNHPYIYATGTSAAQLDQFSTNASLEIFELDSLDPQLDMKSCATFSSSHRYH  
 KLIWGPYKMDSKGDVSGVLIAGGNGNIIYDPSKIIAGDKEVIAQNDKHTGPVRALDVNIFQTNLVA  
 GANESEIYIWDLNNFATPMTGAKTQPPEDISCIANRQVQHILASASPSGRATVWDLRKNPIIKVSDH  
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 KDAKILCSNPNTGEVLYELPTNTQWCFDIQWCPNPVLSAASFDRISVYSIMGGSTDGLRQKQVDKLS  
 SSFGNLDPFGTGQPLPPLQIPQQTAAQHSIVLPLKKPPKWIRRPVGASFSGGKLVTFENVMPHQGAEQ  
 QQQQHHVFISQVVEKEFLSRSDQLQAVQSQGFINYCQKKIDASQTEFEKNVWSFLKVNFEEDSRGKYL  
 ELLGYRKEDLGKKIALALNKVDGANVALKDSQVAQSDGEESPAEEQLLGEHIKEEKEESEFLPSSGGT  
 FNISVSGDIDGLITQALLTGNFESAVDLCLHDNRMAIILAIAGGQELLARTQKKYFAKSQSKITRLIT  
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 PDNTNQPNIMQLRDRLCRAQGEVPAGHESPKIPYEKQQLPKGRPGPVAGHHQMPRVQTQQYYPHGENPPP  
 PGFIMHGNVNPNAAGQLPTSPGHMHTQVPPYPQPYQPAQPYPFGTGGSAMYRPQPVAPPTSNAYPNT  
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 SELPASQRTGPQNGWDPALNRVPKKKKMPENFMPVPITSPIMNPLGDPQSQMLQQQPSAPVPLSSQS  
 SFPQPHLPGGQPFHGVQQLGQTGMPPSF SKPNIEGAPGAPIGNTFQHVQSLPTKKITKKIPDEHLILK  
 TTFEDLIQRCLSSATDPQTKRKLDDASKRLEFLYDKLREQTLSPITISGLHNIARSIETRYNSEGLTMHT  
 HIVSTSNFSETSAFMPVLKVVLTAQANKLGV

TRTRPLE – GFP Tag – V

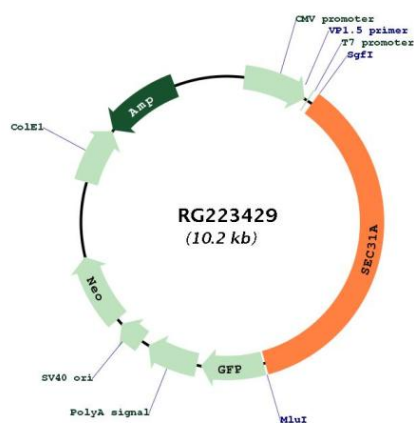
Restriction Sites: SgfI-MluI  
 Cloning Scheme:



ACCN: NM\_001077207  
 ORF Size: 3660 bp

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>                                                                                                                                                                                                                                                                                                                                       |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>                                                                                                                                                                                                                                                                  |
| <b>RefSeq:</b>                | <a href="#">NM_001077207.3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>RefSeq Size:</b>           | 4269 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq ORF:</b>            | 3663 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Locus ID:</b>              | 22872                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>UniProt ID:</b>            | <a href="#">O94979</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cytogenetics:</b>          | 4q21.22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Summary:</b>          | 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 RG223429