

Product datasheet for **SC315648**

SEC31A (NM_001077208) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEC31A (NM_001077208) Human Untagged Clone
Tag:	Tag Free
Symbol:	SEC31A
Synonyms:	ABP125; ABP130; HSPC275; HSPC334; NEDSOSB; SEC31L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC315648 representing NM_001077208. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGGATCGCC**
 ATGAAGTTAAAGGAAGTAGATCGTACAGCCATGCAGGCATGGAGCCCTGCCAGAATCACCCATTATC
 CTAGCAACAGGAACATCTGCTCAGCAATTGGATGCAACATTTAGTACGAATGCTTCCCTTGAGATATTT
 GAATTAGACCTCTCTGATCCATCCTTGGATATGAAATCTTGTCACATTCTCTCTTCTCACAGGTAC
 CACAAGTTGATTTGGGGCCTTATAAAATGGATTCCAAAGGAGATGTCTCTGGAGTTCTGATTGCAGGT
 GGTGAAAATGGAATATTATTCTATGATCCTTCTAAAATTATAGCTGGAGACAAGGAAGTTGTGATT
 GCCCAGAATGACAAGCATACTGGCCAGTGAGAGCCTTGGATGTGAACATTTTCCAGACTAATCTGGTA
 GCTTCTGGTGCTAATGAATCTGAAATCTACATATGGGATCTAAATAATTTTGCAACCCCAATGACACCA
 GGAGCCAAAACACAGCCGCCAGAAGATATCAGCTGCATTGCATGGAACAGACAAGTTCAGCATATTTTA
 GCATCAGCCAGTCCCAGTGGCCGGGCACTGTATGGGATCTTAGAAAAATGAGCCAATCATCAAAGTC
 AGTGACCATAGTAACAGAATGCATTGTTCTGGGTTGGCATGGCATCCTGATGTTGCTACTCAGATGGTC
 CTTGCCTCCGAGGATGACCGGTTACCAAGTATCCAGATGTGGGATCTTCGATTGCTTCTCTCCACTT
 CGTGTCTGGAAAACCATGCCAGGGGATTTTGGCAATTGCTTGGAGCATGGCAGATCCTGAATTGTTA
 CTGAGCTGTGGAAAAGATGCTAAGATTCTCTGCTCCAATCCAAACACAGGAGAGGTGTTATATGAACCT
 CCCACCAACACACAGTGGTGCTTCGATATTCAGTGGTGTCCTCCGAAATCCTGCTGCTTATCAGCTGCT
 TCGTTTGATGGGCGTATCAGTGTTTATTCTATCATGGGAGGAAGCACAGATGGTTTAAGACAGAAACAA
 GTTGACAAGCTTTCATCATCTTTTGGGAATCTTGATCCCTTTGGCACAGGACAGCCCTTCTCCGTTA
 CAAATTCCACAGCAGACTGCTCAGCATAGTATAGTGTGCTCTGAAGAAGCCGCCCAAGTGGATTGCA
 AGGCCTGTTGGTGCTTCTTTTTCATTTGGAGGCAAACTGGTTACGTTTGAGAATGTCAGAATGCCTTCT
 CATCAGGGAGCTGAGCAGCAGCAGCAGCAGCACCATTGTGTTTATTAGTCAGGTTGAACAGAAAAGGAG
 TTCCTCAGCCGATCAGACCAACTTCAGCAGGCTGTGCAGTCACAAGGATTTATCAATTATTGCCAAAAA
 AAAATTGATGCTTCTCAGACTGAATTTGAGAAAAATGTGTGGTCTTTTGAAGGTAAACTTTGAGGAT
 GATTCTCGTGAAAATACCTTGAACCTTCTAGGATACAGAAAAGAAGATCTAGGAAAGAAGATTGCTTTG


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GCCTTGAACAAAGTGGATGGAGCCAATGTGGCTCTTAAAGACTCTGACCAAGTAGCACAGAGTGATGGG
GAGGAGAGCCCTGCTGCTGAAGAGCAGCTCTTGGGAGAGCACATTAAGAGGAAAAAGAAGATCTGAA
TTTCTACCCTCATCTGGAGGAACATTTAATATCTCTGTCAGTGGGGACATTGATGGTTTAATTACTCAG
GCTTTGCTGACGGGCAATTTTGAGAGTGCTGTTGACCTTTGTTTACATGATAACCGCATGGCCGATGCC
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CAAAGCAAAATTACCAGGCTCATCACTGCAGTGGTGATGAAGAACTGGAAAGAGATTGTTGAGTCTTGT
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TGCTATATTTGTGAGGGAATGTAGAGAAATTAGTTGCATGTTGGACTAAAGCTCAAGATGGAAGCCAC
CCTTTGTCACTTCAGGATCTGATTGAGAAAGTTGTCTCCTGCGAAAAGCTGTGCAACTCACTCAAGCC
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CGTGACAGACTTTGTAGAGCACAAGGAGAGCCTGTAGCAGGACATGAATCACCTAAAATTCGACGAG
AAACAGCAGCTCCCCAAGGGCAGGCCTGGACCAGTTGCTGGCCACCACCAGATGCCAAGAGTTCAAAC
CAACAATATTATCCCATGGAGAAAATCCTCCACCTCCGGGTTTCATAATGCATGGAATGTTAATCCA
AATGCTGCTGGTCAGCTTCCACATCTCCAGGTATATGCACACCCAGGTACCACCTTATCCACAGCCA
CAGCCTTATCAACCAGCCAGCCGTATCCCTTCGGAACAGGGGGTTCAGCAATGTATCGACCTCAGCAG
CCTGTTGCTCCTCTACTTCAAACGCTTACCCTAACACCCCTTACATATCTTCTGCTTCTTCTATACT
GGGCAGTCTCAGCTGTACGCAGCACAGCACCAGGCCTTTCACCTACCTCCAGCCCTGCTACTTCTTTC
CCTCTCCCCCTTCTCTGGAGCATCCTTCCAGCATGGCGGACCAGGAGCTCCACCATCATCTTCAGCT
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TTGGGTGACCCCAAGTCAAAATGCTGCAGCAACAGCCTTCAGTCCAGTACCAGTGTCAAGCCAGTCT
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GGCATGCCACCATCTTTTTCAAAGCCCAATATTGAAGGTGCCCCAGGGGCTCCTATTGGAATACCTTC
CAGCATGTGCAGTCTTTGCCAACAAAAAAATTACCAAGAAACCTATTCCAGATGAGCACCTCATTCTA
AAGACCACATTTGAGGATCTTATTCAGCGCTGCCTTTCTCAGCAACAGACCCCTCAAACCAAGAGGAAG
CTAGATGATGCCAGCAAACGTTTGGAGTTTCTGTATGATAAACTTAGGGAACAGACACTTTCACCAACA
ATCACCAGTGGTTTACACAACATTGCAAGGAGCATTGAACTCGAACTACTCAGAAGGATTGACCATG
CATACCCACATAGTTAGCACCAGCAACTTCAGTGAGACCTCTGCTTTCATGCCAGTCTCAAAGTTGTT
CTCACCAGGCCAATAAGCTGGGTGTC**TAA**
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI
ACCN: NM_001077208
Insert Size: 3618 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001077208.3](#)

RefSeq Size: 4411 bp

RefSeq ORF: 3618 bp

Locus ID: 22872

UniProt ID: [O94979](#)

Cytogenetics: 4q21.22

MW: 131.5 kDa

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]

Transcript Variant: This variant (3) uses an alternate in-frame splice site in the 3' coding region, compared to variant 5. The encoded isoform (3) has the same N- and C-termini, but is shorter than isoform 1. Both variants 3 and 9 encode the same isoform (3).