

## Product datasheet for SC312255

### INSIG1 (NM\_198337) Human Untagged Clone

#### Product data:

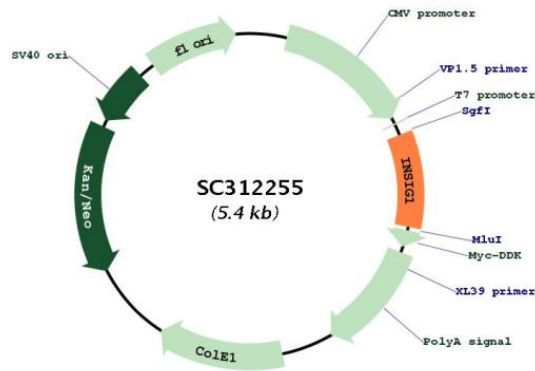
Product Type:	Expression Plasmids
Product Name:	INSIG1 (NM_198337) Human Untagged Clone
Tag:	Tag Free
Symbol:	INSIG1
Synonyms:	CL6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC312255 representing NM_198337. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCAGATTGCACGACCACTTCTGGAGCTGCTCCTGTGCGCACAGCGGAGGGCCGAGGCCCCCGC
CGAGCCAGCGCCGCGGGGCTGGCGGCCAAGGTTGGGGAGATGATCAACGTTTCCGTGTCCGGGCCCTCC
CTGCTGGCGGCCACGGTGCCCCGACGCTGACCCCGCGCCAGGGGCCGAGTGTGCGATGAGCGGC
CCCGAGCCCGGCAGCCCTACCCCAACACCTGGCATCATCGCTGTTGCAGAGGAGCCTCGTGCTCTTC
TCGTTGGGTGGTCTAGCCCTGGTGTCAACCTGCTGCAGATCCAGAGGAATGCTACTCTCTTCCC
GAGGAGGTGATCGCCACCATCTTTCTCCGCTGGTGGTCCCTCCCTGCTGCGGGACAGCAGCTGGT
ATACATCCCAGATTTCTCTATATTCGTTCTTGCTCCCTTGATATTTTTCTCAGGAGCGTCACGG
TGGGGAACATAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

Restriction Sites: Sgfl-Mlul



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**Plasmid Map:**


<b>ACCN:</b>	NM_198337
<b>Insert Size:</b>	495 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	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.
<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).

**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\\_198337.2](#)

**RefSeq Size:** 2728 bp

**RefSeq ORF:** 495 bp

**Locus ID:** 3638

**UniProt ID:** [O15503](#)

**Cytogenetics:** 7q36.3

**Protein Families:** Druggable Genome, Transmembrane

**MW:** 17.5 kDa

**Gene Summary:** This gene encodes an endoplasmic reticulum membrane protein that regulates cholesterol metabolism, lipogenesis, and glucose homeostasis. The encoded protein has six transmembrane helices which contain an effector protein binding site. It binds the sterol-sensing domains of sterol regulatory element-binding protein (SREBP) cleavage-activating protein (SCAP) and 3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMG-CoA reductase), and is essential for the sterol-mediated trafficking of these two proteins. It promotes the endoplasmic reticulum retention of SCAP and the ubiquitin-mediated degradation of HMG-CoA reductase. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2016]

Transcript Variant: This variant (3) lacks two exons in the coding region which results in a frameshift and an early stop codon, compared to variant 1. The encoded isoform (3) has a distinct C-terminus and is shorter than isoform 1. Variants 3 and 7 encode the same protein.