

## Product datasheet for **RG228146**

### **SFTPA1 (NM\_001164645) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SFTPA1 (NM_001164645) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SFTPA1
Synonyms:	COLEC4; PSAP; PSP-A; PSPA; SFTP1; SFTPA1B; SP-A; SP-A1; SP-A1 beta; SP-A1 delta; SP-A1 epsilon; SP-A1 gamma; SPA; SPA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228146 representing NM_001164645 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAGGCCATGCCAGGTGCCAGGAGCAGCGACTGGACCCAGAGCCATGTGGCTGTGCCCTCTGGCCCTCA  
ACCTCATCTTGATGGCAGCCTCTGGTGCTGTGTGCGAAGTGAAGGACGTTTGTGTTGGAACCCCTGGTAT  
CCCTGGAGAGTGTGGAGAGAAGGGGAGCCTGGCGAGAGGGGCCCTCCAGGGCTTCCAGCTCATCTAGAT  
GAGGAGCTCCAAGCCACACTCCACGACTTTAGACATCAAATCCTGCAGACAAGGGGAGCCCTCAGTCTGC  
AGGGCTCCATAATGACAGTAGGAGAGAAGGTCTTCTCCAGCAATGGGCAGTCCATCACTTTTGATGCCAT  
TCAGGAGGCATGTGCCAGAGCAGGCGGCCGATTGCTGTCCCAAGGAATCCAGAGGAAAAATGAGGCCATT  
GCAAGCTTCGTGAAGAAGTACAACACATATGCCTATGTAGGCCTGACTGAGGGTCCAGCCCTGGAGACT  
TCCGCTACTCAGACGGGACCCCTGTAAACTACACCAACTGGTACCGAGGGGAGCCCGCAGGTCGGGGAAA  
AGAGCAGTGTGTGAGATGTACACAGATGGGCAGTGAATGACAGGAACTGCCTGTACTCCCGACTGACC  
ATCTGTGAGTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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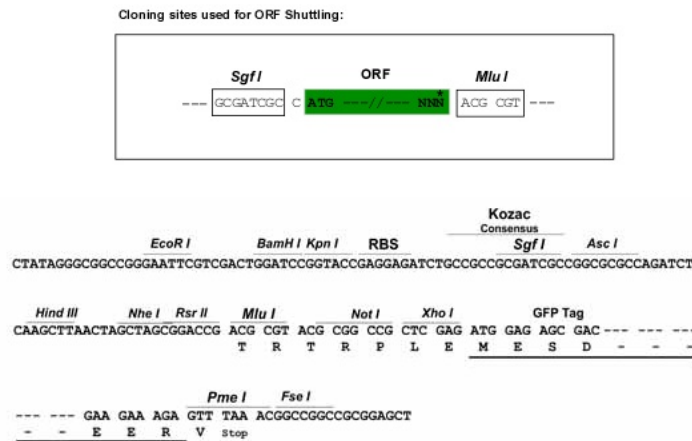
**Protein Sequence:** >RG228146 representing NM\_001164645  
 Red=Cloning site Green=Tags(s)

MRPCQVPGAATGPRAMWLCPLALNLIILMAASGAVCEVKDVCVGTGPGIPGECGKGEKGERGPPGLPAHLD  
 EELQATLHDFRHQILQTRGALSLQGSIMTVGEKVFSSNGQSITFDALIQEACARAGGRIAVPRNPEENEAI  
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 ICEF

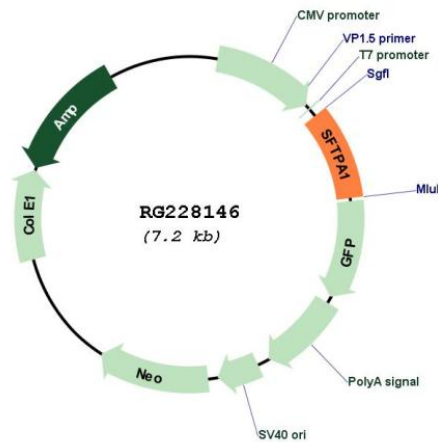
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001164645

**ORF Size:** 642 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_001164645.2</a>
<b>RefSeq Size:</b>	2075 bp
<b>RefSeq ORF:</b>	645 bp
<b>Locus ID:</b>	653509
<b>Cytogenetics:</b>	10q22.3
<b>Gene Summary:</b>	This gene encodes a lung surfactant protein that is a member of a subfamily of C-type lectins called collectins. The encoded protein binds specific carbohydrate moieties found on lipids and on the surface of microorganisms. This protein plays an essential role in surfactant homeostasis and in the defense against respiratory pathogens. Mutations in this gene are associated with idiopathic pulmonary fibrosis. Alternate splicing results in multiple transcript variants. [provided by RefSeq, May 2010]