

Product datasheet for RG215681

OriGene Technologies, Inc.

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SFTPA1 (NM_001093770) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SFTPA1 (NM_001093770) 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 >RG215681 representing NM_001093770

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA





Protein Sequence: >RG215681 representing NM_001093770

Red=Cloning site Green=Tags(s)

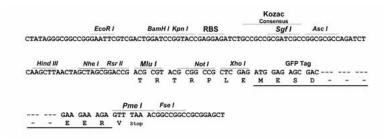
MRPCQVPGAATGPRAMWLCPLALNLILMAASGAVCEVKDVCVGSPGIPGTPGSHGLPGRDGRDGLKGDPG PPGPMGPPGEMPCPPGNDGLPGAPGIPGECGEKGEPGERGPPGLPAHLDEELQATLHDFRHQILQTRGAL SLQGSIMTVGEKVFSSNGQSITFDAIQEACARAGGRIAVPRNPEENEAIASFVKKYNTYAYVGLTEGPSP GDFRYSDGTPVNYTNWYRGEPAGRGKEQCVEMYTDGQWNDRNCLYSRLTICEF

Restriction Sites: Sgf

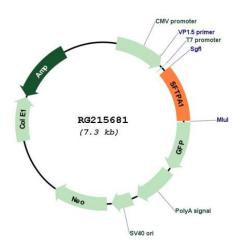
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM_001093770

ORF Size: 789 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 customport@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. <u>More info</u>

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.

RefSeq: <u>NM 001093770.3</u>

 RefSeq Size:
 2219 bp

 RefSeq ORF:
 792 bp

 Locus ID:
 653509

 UniProt ID:
 Q8IWL2

 Cytogenetics:
 10q22.3

Gene Summary:

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]