

Product datasheet for **RC228130**

SFTPA1 (NM_001164646) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SFTPA1 (NM_001164646) Human Tagged ORF Clone
Tag:	Myc-DDK
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-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228130 representing NM_001164646 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGCTGTGCCCTCTGGCCCTCAACCTCATCTTGATGGCAGCCTCTGGTGCTGTGTGCCAAGTGAAGG
ACGTTTGTGTTGGAACCCCTGGTATCCCTGGAGAGTGTGGAGAGAAGGGGAGCCTGGCGAGAGGGGCC
TCCAGGGCTTCCAGCTCATCTAGATGAGGAGCTCCAAGCCACACTCCACGACTTTAGACATCAAATCCTG
CAGACAAGGGGAGCCCTCAGTCTGCAGGGCTCCATAATGACAGTAGGAGAGAAGGTCTTCTCCAGCAATG
GGCAGTCCATCACTTTTGTGCCATTGAGGAGCATGTGCCAGAGCAGGGCGCCGATTGCTGTCCCAAG
GAATCCAGAGGAAAATGAGGCCATTGCAAGCTTCGTGAAGAAGTACAACACATATGCCTATGTAGGCCTG
ACTGAGGGTCCCAGCCCTGGAGACTTCCGCTACTCAGACGGGACCCTGTAAACTACACCAACTGGTACC
GAGGGGAGCCCGAGGTCGGGGAAAAGAGCAGTGTGTGGAGATGTACACAGATGGCAGTGAATGACAG
GAACTGCCTGACTCCCAGTACCATCTGTGAGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228130 representing NM_001164646
 Red=Cloning site Green=Tags(s)

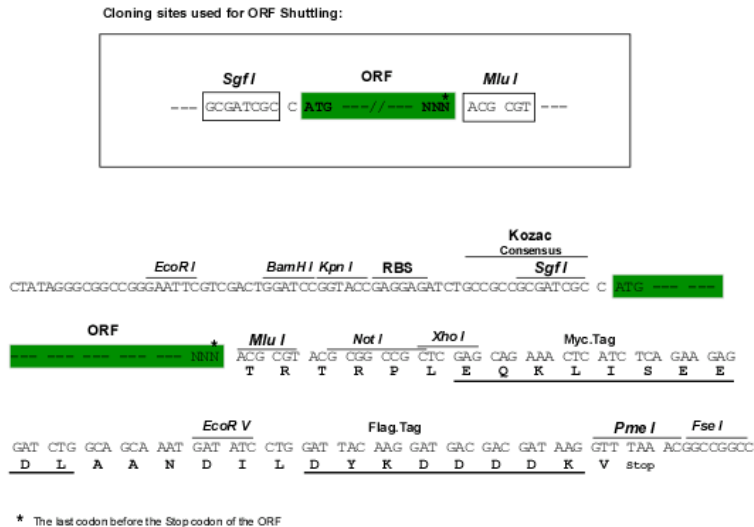
MWLCPLALNLIILMAASGAVCEVKDVCVGTGPIGECGEKGEKGERGPPGLPAHLDEELQATLHDFRQIL
 QTRGALSLOGSIMTVGEKVFSSNGQSITFDAIQEACARAGGRIAVPRNPEENEAIASFVKKYNTYAYVGL
 TEGPSPGDFRYS DGTPVNYTNWYRGEPAGRGKEQC VEMYTDGQWDRNCLYSRLTICEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1470_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164646

ORF Size: 597 bp

OTI Disclaimer: 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 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: [NM_001164646.2](#)

RefSeq ORF: 600 bp

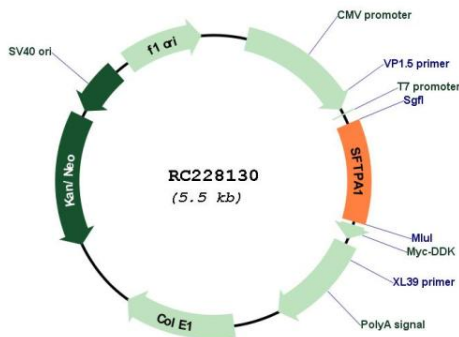
Locus ID: 653509

Cytogenetics: 10q22.3

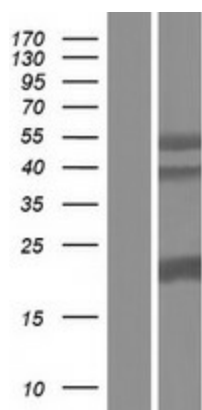
MW: 21.5 kDa

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]

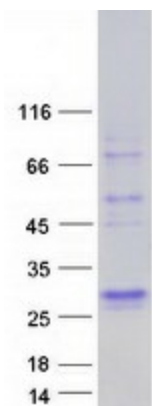
Product images:



Circular map for RC228130



Western blot validation of overexpression lysate (Cat# [LY431158]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228130 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SFTPA1 protein (Cat# [TP328130]). The protein was produced from HEK293T cells transfected with SFTPA1 cDNA clone (Cat# RC228130) using MegaTran 2.0 (Cat# [TT210002]).