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Product datasheet for RG229672

SFTPC (NM_001172410) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SFTPC (NM_001172410) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SFTPC
Synonyms:	BRICD6; PSP-C; SFTP2; SMDP2; SP-C; SP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG229672 representing NM_001172410
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATGTGGGCAGCAAAGAGGTCCTGATGGAGAGCCCGCCGGACTACTCCGCAGCTCCCCGGGGCCGAT
TTGGCATTCCCTGCTGCCCAGTGCACCTGAAACGCCTTCTTATCGTGGTGGTGGTGGTGGTCCTCATCGT
CGTGGTGATTGTGGGAGCCCTGCTCATGGGTCTCCACATGAGCCAGAAACACACGGAGATGGTTCTGGAG
ATGAGCATTGGGGCGCCGGAAGCCCAGCAACGCCTGGCCCTGAGTGAGCACCTGGTTACCACTGCCACCT
TCTCCATCGGCTCCACTGGCCTCGTGGTGTATGACTACCAGCAGCTGCTGATCGCCTACAAGCCAGCCCC
TGGCACCTGCTGCTACATCATGAAGATAGCTCCAGAGAGCATCCCCAGTCTTGAGGCTCTCACTAGAAAA
GTCCACAACTTCCAGATGGAATGCTCTCTGCAGGCCAAGCCCGCAGTGCCTACGTCTAAGCTGGGCCAGG
CAGAGGGGCGAGATGCAGGCTCAGCACCCTCCGGAGGGGACCCGGCCTTCCTGGGCATGGCCGTGAGCAC
CCTGTGTGGCGAGGTGCCGCTCTACTACATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG229672 representing NM_001172410
Red=Cloning site Green=Tags(s)

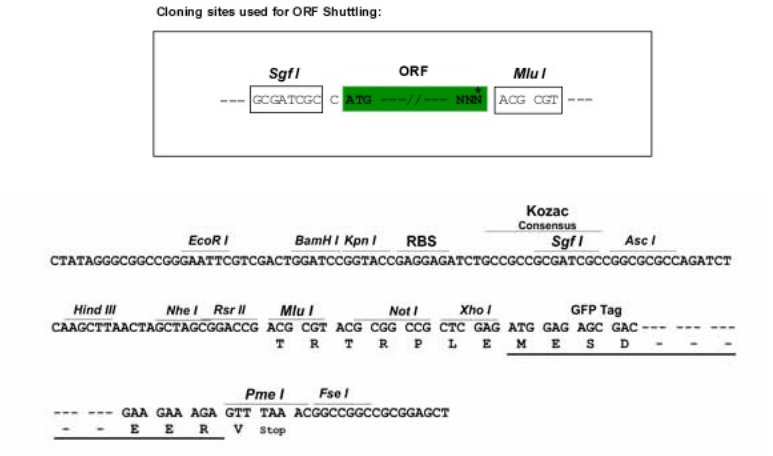
MDVGSKEVLMESPPDYSAAPRGRFGIPCCPVHLKRLLIVVVVVVLIVVVIVGALLMGLHMSQKHTEMVLE
MSIGAPEAQQRLALSEHLVTTATFSIGSTGLVVYDYQQLLIAYKPAPGTCCYIMKIAPESIPSLEALTRK
VHNFQMECSLQAKPAVPTSKLGQAEGRDAGSAPSGGDPAFLGMAVSTLCGEVPLYYI

TRTRPLE - GFP Tag - V

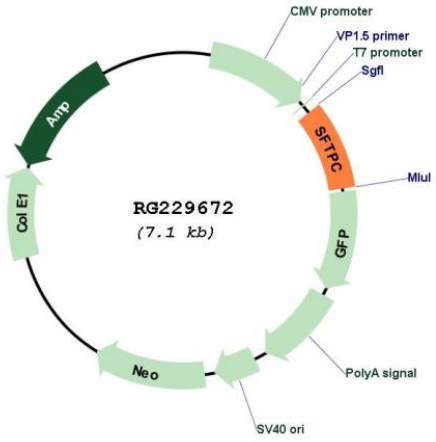
Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001172410
ORF Size:	591 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_001172410.2
RefSeq Size:	991 bp
RefSeq ORF:	594 bp
Locus ID:	6440
UniProt ID:	P11686
Cytogenetics:	8p21.3
Protein Families:	Secreted Protein, Transmembrane
Gene Summary:	This gene encodes the pulmonary-associated surfactant protein C (SPC), an extremely hydrophobic surfactant protein essential for lung function and homeostasis after birth. Pulmonary surfactant is a surface-active lipoprotein complex composed of 90% lipids and 10% proteins which include plasma proteins and apolipoproteins SPA, SPB, SPC and SPD. The surfactant is secreted by the alveolar cells of the lung and maintains the stability of pulmonary tissue by reducing the surface tension of fluids that coat the lung. Multiple mutations in this gene have been identified, which cause pulmonary surfactant metabolism dysfunction type 2, also called pulmonary alveolar proteinosis due to surfactant protein C deficiency, and are associated with interstitial lung disease in older infants, children, and adults. Alternatively spliced transcript variants encoding different protein isoforms have been identified.[provided by RefSeq, Feb 2010]