

Product datasheet for **RR210033**

Cftr (NM_031506) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Cftr (NM_031506) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Cftr
 Synonyms: RGD1561193
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 Cell Selection: Neomycin
 ORF Nucleotide Sequence: >RR210033 representing NM_031506
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAGAAAGTCGCCTCTGGAGAAAGCCAGCTTTATCTCCAAACTCTTCTCAGCTGGACCACACCAATTT
 TGAAAAAGGGTACAGACACCCTTGGAGCTGTCAGACATATACCAAGCCCCTTCTCTGATTACAGCTGA
 CCACCTGTCTGAAAAGCTAGAAAGAGAATGGGACAGGGAACAAGCTTCCAAAAGAAGCCCCAGCTTATC
 CAGCCCTCCGGCGATGCTTTGTCTGGAGATTCGTCCTTCTACGGAGTCTTGTATACCTCGGGGAAGTCA
 CCAAGGCTGTCCAGCCTGTCTTGTCTAGGAAGAATCATAGCATCCTATGATCCAGACAACCGGAGGAGCG
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 GCTATTTTTGGCCTTCATCACATTGGAATGCAGATGAGAATAGCCATGTTTAGCTTGATTATAAGAAGA
 CTTTAAAGTTGTCAAGCCGTGTTCTTGATAAAAAGTATTGGACAACCTATTAGTCTTCTTTCCAAACA
 CCTGAACAAATTTGATGAAGGACTTGCCTTGGCACATTTATATGGATTGCTCCTTACAAGTGGTCTT
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 AAGACTTGTGATCACATCAGAAGTTATTGACAATATCTATTCTGTTAAGGCATATTGTTGGGAATCAGCG
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 TCAATTTGAATATAAAGAAAGGAGAGATGTTGGCTATTACTGGATCTACTGGAGCAGGAAAGACATCACT
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 TCCTCTCAAAATTTCTGGATTATGCCGGTACTATCAAAGAAAATATCATCTTTGGTGTTCCTATGATG



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AGTACAGATATAAGAGTGTGTCAAAGCTGCCAACTACAGGAGGACATACCAAGTTTGCAGAACAAGA
CAACACAGTTCTTGGAGAAGGTGGAGTCACACTCAGTGGAGGTCAACGTGCAAGAATTTCTTTAGCAAGA
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CCAAGTGATTCGACGAGTTCTAAGACAAGCCTTCGCTGGTTGCACAGTAGTCTCTGTGAACACAGGATA
GAAGCAATGTTGGACTGTCAGCGATTTTGGTCATAGAGCAGGGCAATGTCTGGCAGTATGAATCCCTCC
AGGCACCTCTGAGCGAGAAGAGTGTCTTCCAGCGAGCCCTTAGCTCCTCAGAAAAGATGAAGCTCTTCCA
CGGCCGGCACTCCAGCAAGCAGAAGCCTCGACACAGATCACTGCTGTGAAAGAGGAGACGGAGGAAGAA
GTGCAAGAGACCCGGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR210033 representing NM_031506
 Red=Cloning site Green=Tags(s)

MQKSPLEKASFISKLFFSWTTPILRKGYRHHLELSDIYQAPSSDSADHLSEKLEREWDREQASKKKPOLI
 HALRRCFVWRFVYGVLLYLGEVTKAVQPVLLGRIIASYDPDNTTEERSIAIYLGIGLCLLFIVRTLHHP
 AIFGLHHIGMQMRIAMFSLIYKTKLSSRVLDKISIGQLISLLSNLNKFDGLALAHFIWIAPLQVVL
 LMGLLWDLQFSAFCGLGLLIVLVIFQAILGKMMVKYRDKRAAKINERLVTSEVIDNIYSVKAYCWESA
 MEKIIIESLREEELKMTRRSAYMRFFTSSAFFSFGFFVFLSVLPYTVINGIVLRKIFTTISFCIVLRMSV
 TRQFPYAVQIWDYSLGMIRKIQDFLQTQEYKVVLEYNLMFTGLVMENVTAFWEEGFQELLEKVLNNDNRK
 TSNGENHLSFHLCLVGNPVLKNINLNKKGEMLAITGSTGAGKTSLLMLILGELEASEGIIKHSGRVSVF
 SSQISWIMPGTIKENIIFGVSYDEYRYKSVKACQLQEDITKFAEQDNTVLGEGGVTLSGGQRARISLAR
 AVYKDADLYLLDSPFGYLDVLTTEEQIFESCCKLMASKTRILVTSKMEQLKADKILILHEGSSYFYGTF
 SELQSLRPFSSKLMGYDTDFQFTEERRSSILTETLRRFVDDASTTWNKAKQSFRTGEFGEKRNKNSIL
 SSFSSVKKISIVQKTPLSIEGESDDLQERRLSLVPDSEHGAAALPRSNMITAGPTFPGRRRQSVLDLMTF
 TPSSVSSSLQRTRASIRKISLAPRISLKEEDIYSRRLSQDSTLNI TEEINEEDLKECFDDMVKIPTVTT
 WNTYLRVFTLHRGLFAVLWCVLVFLVEVAASLFLVLLKNNPVNGGNGTKIANTSYVVVITSSSFYII
 FYIYVGVADTLLALSFRGLPLVHTLITASKILHRKMLHSILHAPMSTFNKLGAGILNRFKSDIAILD
 FLPLTIFDFIQLLFIVVGAIIIVVSALQPIFLATVPGLAVFILLRAYFLHTSQQLKQLESEGRSIFTHL
 VTSLKGLWTLRAFRRQTYFETLFHKALNLHTANWFMYLALTRWFQMRIDMIFVLFVIVTFISILTTGEG
 EGTGIIITLAMNIMSTLQWAVNSSIDTSLMRSVSRVFKFIDIQTEESICTKIMKELHSEDSPNALVIK
 NEHVKKCDTWPSGGEMVVKDLTKYVDDGNAILENIFSISPGQRVGLLGRGSGKSTLLSAFLRMLNIK
 GEIQIDGVSWNSMTLQEWKAFGVITQKVFIFSGTFRQNLDPNGKWRDEEIKWVADQVGLKSVIEQFPQG
 LNFTLVGGYVLSHGKQLMCLARSVLSKAKIILLDEPSANLDPITYQVIRRVLRQAFAGCTVVLCEHRI
 EAMLDCQRFLVIEQGNVWQYESLQALLSEKSVFQRALSSEKMKLFHGRHSSKQKPRQTITAVKEETEE
 VQETRL

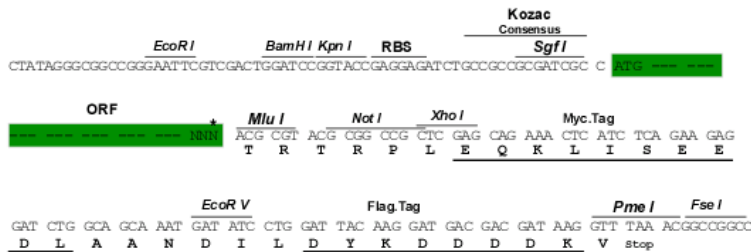
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

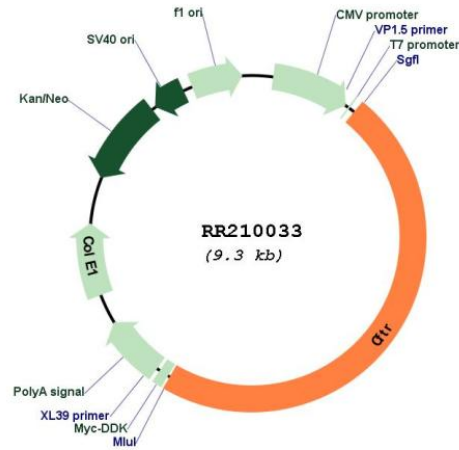
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_031506

ORF Size: 4428 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 custsupport@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. [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:	<ol style="list-style-type: none">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_031506.1</u> , <u>NP_113694.1</u>
RefSeq Size:	6287 bp
RefSeq ORF:	4431 bp
Locus ID:	24255
UniProt ID:	<u>P34158</u>
Cytogenetics:	4q21
MW:	167.8 kDa
Gene Summary:	cAMP-activated chloride channel and ATP binding cassette (ABC) transporter involved in intestinal anion secretion [RGD, Feb 2006]