

Product datasheet for **SC300080**

CFTR (NM_000492) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CFTR (NM_000492) Human Untagged Clone
Tag:	Tag Free
Symbol:	CFTR
Synonyms:	ABC35; ABCC7; CF; CFTR/MRP; dj760C5.1; MRP7; TNR-CFTR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000492 edited
GGTCTTTGGCATTAGGAGCTTGAGCCCAGACGGCCCTAGCAGGGACCCCGCCGAGGAG
GACCATGCAGAGGTCGCCTCTGGAAAAGCCAGCGTTGTCTCCAACTTTTTTTCAGCTG
GACCAGACCAATTTTGAGGAAAGGATACAGACAGCGCCTGGAATTGTGACACATATACCA
AATCCCTTCTGTTGATTCTGCTGACAATCTATCTGAAAAATTGGAAAGAGAATGGGATAG
AGAGCTGGCTTCAAAGAAAAATCCTAAACTCATTAAATGCCCTTCGGCGATGTTTTTCTG
GAGATTTATGTTCTATGGAATCTTTTTATTTAGGGGAAGTCACCAAAGCAGTACAGCC
TCTCTTACTGGGAAGAATCATAGCTTCTATGACCCGGATAACAAGGAGGAACGCTCTAT
CGCGATTTATCTAGGCATAGGCTTATGCCTTCTCTTTATTGTGAGGACACTGCTCCTACA
CCCAGCCATTTTGGCCTTCATCACATTGGAATGCAGATGAGAATAGCTATGTTTAGTTT
GATTTATAAGAAGACTTTAAAGCTGTCAAGCCGTGTTCTAGATAAAATAAGTATTGGACA
ACTTGTTAGTCTCCTTTCCAACAACCTGAACAAATTTGATGAAGGACTTGCAATGGCACA
TTTCGTGTGGATCGCTCCTTTGCAAGTGGCACTCCTCATGGGGCTAATCTGGGAGTTGTT
ACAGGCGTCTGCCTTCTGTGGACTTGGTTTCTGATAGTCCTTGCCTTTTTTCAGGCTGG
GCTAGGGAGAATGATGATGAAGTACAGAGATCAGAGAGCTGGGAAGATCAGTGAAGACT
TGTGATTACCTCAGAAATGATTGAAAAATCCAATCTGTTAAGGCATACTGCTGGGAAGA
AGCAATGGAAAAAATGATTGAAAACTTAAGACAAAACAGAACTGAACTGACTCGGAAGGC
AGCCTATGTGAGATACTCAATAGCTCAGCCTTCTTCTCAGGGTTCTTTGTGGTGTT
TTTATCTGTGCTTCCCTATGCACTAATCAAAGGAATCATCCTCCGGAAAAATTTACCAC
CATCTCATTCTGATTGTTCTGCGCATGGCGTCACTCGGCAATTTCCCTGGGCTGTACA
AACATGGTATGACTCTCTTGGAGCAATAAACAAAATACAGGATTTCTTACAAAAGCAAGA
ATATAAGACATTGGAATATAACTTAACGACTACAGAAAGTGTGATGGAGAATGTAACAGC
CTTCTGGGAGGAGGGATTTGGGAATTATTTGAGAAAGCAAAAACAATAACAATAG
AAAAACTTCTAATGGTGTGACAGCCTCTTCTCAGTAATTTCTCACTTCTTGGTACTCC
TGTCTGAAAGATATTAATTTCAAGATAGAAAGAGGACAGTTGTTGGCGTTGCTGGATC
CACTGGAGCAGGCAAGACTTCACTTCTAATGGTGATTATGGGAGAACTGGAGCCTTCAGA
GGTAAATTAAGCACAGTGAAGAATTTCACTTCTGTTCTCAGTTTTCTGGATTATGCC



[View online »](#)

TGGCACCATTAAGAAAATATCATCTTTGGTGTTCCTATGATGAATATAGATACAGAAG
 CGTCATCAAAGCATGCCAACTAGAAGAGGACATCTCCAAGTTTGCAGAGAAAAGACAATAT
 AGTTCTTGGGAAAGGTGGAAATCACACTGAGTGGAGGTCAACGAGCAAGAAATTTCTTTAGC
 AAGAGCAGTATACAAAGATGCTGATTTGTATTTATTAGACTCTCCTTTTGGATACCTAGA
 TGTTTTAACAGAAAAAGAAATATTTGAAAGCTGTGTCTGTAACCTGATGGCTAACAAAAC
 TAGGATTTTGGTCACTTCTAAAAATGGAACATTTAAAGAAAGCTGACAAAAATTAATTTT
 GCATGAAGGTAGCAGCTATTTTTATGGGACATTTTCAGAACTCCAAAATCTACAGCCAGA
 CTTTAGCTCAAAAACCTCATGGGATGTGATTCTTTGACCAATTTAGTGCAGAAAGAAGAAA
 TTCAATCCTAACTGAGACCTTACACCGTTTCTCATTAGAAGGAGATGCTCCTGTCTCCTG
 GACAGAAAACAAAAACAATCTTTTAAACAGACTGGAGAGTTTGGGGAAAAAGGAAGAA
 TTCTATTCTCAATCCAATCAACTCTATACGAAAATTTCCATTGTGCAAAAAGACTCCCTT
 ACAAATGAATGGCATCGAAGAGGATTCTGATGAGCCTTTAGAGAGAAGGCTGTCTTAGT
 ACCAGATTCTGAGCAGGGAGAGGCGATACTGCCTCGCATCAGCGTATCAGCACTGGCCC
 CACGCTTCAGGCACGAAGGAGGCGAGTCTGTCTGAACCTGATGACACACTCAGTTAACCA
 AGGTCAGAACATTCACCGAAAGACAACAGCATCCACACGAAAAGTGTCACTGGCCCTCA
 GGCAAACCTTGACTGAACTGGATATATATCAAGAAGGTTATCTCAAGAACTGGCTTGGAA
 AATAAGTGAAGAAATTAACGAAGAAGACTTAAAGGAGTGTCTTTTTGATGATATGGAGAG
 CATACCAGCAGTGACTACATGGAACACATACCTTCGATATATTACTGTCCACAAGAGCTT
 AATTTTTGTGCTAATTTGGTGTCTAGTAATTTTTCTGGCAGAGGTGGCTGCTTCTTTGGT
 TGTGCTGTGGCTCCTTGGAAACTCCTCTTCAAGACAAAGGGAATAGTACTCATAGTAG
 AAATAACAGCTATGCAGTGATTATCACCAGCACCAGTTCGATTATGTGTTTTACATTTA
 CGTGGGAGTAGCCGACACTTTGCTTGTATGGGATTCTTCAGAGGTCTACCACTGGTGCA
 TACTCTAATCACAGTGTGAAAAATTTACACCACAAAATGTTACATTCTGTTCTTCAAGC
 ACCTATGTCAACCCTCAACACGTTGAAAGCAGGTGGGATTCTTAATAGATTCTCCAAGA
 TATAGCAATTTTGGATGACCTTCTGCCTTTACCATATTTGACTTCATCCAGTTGTTATT
 AATTGTGATTGGAGCTATAGCAGTTGTGCGAGTTTTACAACCCTACATCTTTGTTGCAAC
 AGTGCCAGTGATAGTGGCTTTTATTATGTTGAGAGCATATTTCTCCAAACCTCAGAGCA
 ACTCAAACAACCTGGAATCTGAAGGCAGGAGTCCAATTTTCACTCATCTTGTTACAAGCTT
 AAAAGGACTATGGACACTTCGTGCCTTCGGACGGCAGCCTTACTTTGAACTCTGTTCCA
 CAAAGCTCTGAATTTACATACTGCCAAGTGGTCTTGTACCTGTCAACACTGCGTGGTT
 CCAAATGAGAATAGAAATGATTTTTGTCATCTTCTTATTGCTGTACCTTCATTTCCAT
 TTTAACAACAGGAGAAGGAGAAGGAAGAGTTGGTATTATCCTGACTTTAGCCATGAATAT
 CATGAGTACATTGCAGTGGGCTGTAAACTCCAGCATAGATGTGGATAGCTTGATGCGATC
 TGTGAGCCGAGTCTTTAAGTTCATTGACATGCCAACAGAGGTAACCTACCAAGTCAAC
 CAAACCATACAAGAAATGGCCAACCTCGAAAAGTTATGATTATTGAGAATTCACACGTGAA
 GAAAGATGACATCTGGCCCTCAGGGGGCCAAATGACTGTCAAAGATCTCAGCAAAAATA
 CACAGAAGGTGGAATGCCATATTAGAGAACATTTCTTCTCAATAAGTCTGGCCAGAG
 GGTGGGCTCTTGGGAAGAACTGGATCAGGGAAGAGTACTTTGTTATCAGCTTTTTTGG
 ACTACTGAACACTGAAGGAGAAAATCCAGATCGATGGTGTGTCTTGGGATTCAATAACTTT
 GCAACAGTGGAGGAAAGCCTTTGGAGTGATACCACAGAAAGTATTTATTTTTTCTGGAAC
 ATTTAGAAAAAATTGGATCCCTATGAACAGTGGAGTGATCAAGAAATATGGAAAGTTGC
 AGATGAGGTTGGGCTCAGATCTGTGATAGAACAGTTTCTGGGAAGCTTGACTTTGTCTT
 TGTGGATGGGGCTGTGCTCCTAAGCCATGGCCACAAGCAGTTGATGTGCTTGGCTAGATC
 TGTTCTCAGTAAGGCGAAGATCTTGTGCTTGTGATGAACCCAGTGTCTATTTGGATCCAGT
 AACATAACAAATAATTAGAAGAACTCTAAAACAAGCATTGCTGATTGCACAGTAATTCT
 CTGTGAACACAGGATAGAAGCAATGCTGGAATGCCAACAAATTTTGGTCAAGAAGAGAA
 CAAAGTGGCGCAGTACGATTCATCCAGAACTGCTGAACGAGAGGAGCCTCTTCCGGCA
 AGCCATCAGCCCCCTCCGACAGGGTGAAGCTCTTTCCACCGGAACTCAAGCAAGTGCAA
 GTCTAAGCCCCAGATTGCTGCTCTGAAAGAGGAGACAGAAGAAGAGGTGCAAGATACAAG
 GCTTTAGAGAGCAGCATAAATGTTGACATGGGACATTTGCTCATGGAAATTGGAGCTCGTG
 GGACAGTCACCTCATGGAATTGGAGCTCGTGGAACAGTTACCTCTGCCTCAGAAAACAAG
 GATGAATTAAGTTTTTTTTTAAAAAAGAAACATTTGGTAAGGGGAATTGAGGACA

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000492 unedited NTTTTGTCGGAGTTTATATTTTGTATACGACTCACTATAGGCGGCCGCGATTGCCCCTTGG TCTTTGGCATTAGGAGCTTGAGCCCAGACGGCCCTAGCAGGGACCCAGCGCCCGAGAGA CCATGCAGAGGTGCGCTCTGGAAAAGCCAGCGTGTCTCCAACTTTTTTTCAGCTGGAC CAGACCAATTTTGAGGAAAGGATACAGACAGCGCCTGGAATTGTCAGACATATACCAAT CCCTTCTGTTGATTCTGCTGACAATCTATCTGAAAAATTGAAAGAGAATGGGATAGAGA GCTGGCTTCAAAGAAAAATCCTAACTCATTAATGCCCTTCGGCGATGTTTTTTCTGGAG ATTTATGTTCTATGGAATCTTTTTATATTTAGGGGAAGTACCANAGCAGTACAGCCTCT CTTACTGGGAAGAATCATAGCTTCTATGACCCGGATAACCAAGGAGAACGCTCTATCGC GATTTATCTAAGCATAGGCTTATGCCTTCTTTATTGTGAGGACACTGGCTCTACCCCC AGCCATTTTTGGCCTTATTACATGGAATGCAGATGAAATAGCTATGTTTAGTTGGATTA TTAAGAGACCTTAAAGCTGTCAAACCCGGTCTAGATAAAAAAGTTTTTGAACAACTT GTTATTCTCTTTCCAACAACCTGAACAAATTTATGAAAGATTTGCTTTGCCCATTTT GGGGGATCGCTCCCTTGCAAGGGCACCTCTCAGGGGCTATCTTGGGGATTGTTA CAGGCGTTTGTGCCTTTGGGACTTGGGATTCCCGAAAGACCCTGGCCCTTTTTTAA GCTGGGGCTTTTGGGAGAAATGTTGTTTGAAGTCCCAAAATTCAGAGGCGCTTGGAA AATCCCCTGCGAG</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000492 unedited NCGTAAANNNNNNGGGCCCCATGGGAGATGGTCAGCTTGCCAGGGCCAGGNAAGCAC TGGGGNAAGGGGTACAGGGNATGCCACCCGGGNATCTGTTTCAAGAAAGCTATGACCGCG GCCGCAATCTAGAGTCGACAAGCTTGATATCGGTACCGAGCTCGGATCCACTAGTAACGG CCGCCAGTGTGCTGGAATTCGCCCTTGTCTCAATCCCCTTACCAAATGTTTCTTTTTT AAAAAAACTTAATTCATCCTTGTCTTCTGAGGCAGAGGTAAGTGTCCACGAGCTCCA ATTCCATGAGGTGACTGTCCCACGAGCTCCAATCCATGAGCAAATGTCCCATGTCAACA TTTATGCTGCTCTCTAAAGCCTTGATCTTGCACCTCTTCTTCTGCTCTCTTTTCAGAG CAGCAATCTGGGGCTTAGACTTGCACCTTGCTTGAAGTCCGGTGGGGAAAGAGCTTACCC TGTCGGAGGGGCTGATGGCTTGCCGGAAGAGGCTCCTCTCGTTTACAGAGTTTCTGGATGG AATCGTACTGCCGCACTTTGTTCTTCTATGACCAAAAATTGTTGGCATTCCAGCATTG CTTCTATCCTGTGTTTACAGAGAATTAAGTGTGCAATCAGCAAATGCTTGTTTTAGAGTTC TTCTAATTATTTGGTATGTTACTGGATCCAAATGAGCACTGNGTTCATCAAGCAGCAAGA TCTTCGCCTTACTGAGAACAGATCTAGCCAAGCACATCAACTGCTTGTGGCCATGGCTTA GGACACAGCCCCATCCACAAGGACAAAGTCAAGCTCCCCAGGAACTGTTCTATCACAG ATCTGAGCCCAACCTCATCTGCAACTTTTCATAT</p>
Restriction Sites:	Please inquire
ACCN:	NM_000492
Insert Size:	4900 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_000492.3](#), [NP_000483.3](#)

RefSeq Size: 6132 bp

RefSeq ORF: 4443 bp

Locus ID: 1080

UniProt ID: [P13569](#)

Cytogenetics: 7q31.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters, Vibrio cholerae infection

Gene Summary: This gene encodes a member of the ATP-binding cassette (ABC) transporter superfamily. The encoded protein functions as a chloride channel, making it unique among members of this protein family, and controls ion and water secretion and absorption in epithelial tissues. Channel activation is mediated by cycles of regulatory domain phosphorylation, ATP-binding by the nucleotide-binding domains, and ATP hydrolysis. Mutations in this gene cause cystic fibrosis, the most common lethal genetic disorder in populations of Northern European descent. The most frequently occurring mutation in cystic fibrosis, DeltaF508, results in impaired folding and trafficking of the encoded protein. Multiple pseudogenes have been identified in the human genome. [provided by RefSeq, Aug 2017]