

## Product datasheet for KN216476BN

# **CFTR Human Gene Knockout Kit (CRISPR)**

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

**Donor DNA:** mBFP-Neo

Symbol: **CFTR** Locus ID: 1080

**KN216476G1**, CFTR gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

**KN216476G2**, CFTR gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN216476BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is

> designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

P13569

NM 000492 RefSeq:

UniProt ID:

Synonyms: ABC35; ABCC7; CF; CFTR/MRP; dJ760C5.1; MRP7; TNR-CFTR

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]



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# **Product images:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter