

## Product datasheet for **KN222743**

### Sodium bicarbonate transporter like protein 11 (SLC4A11) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Sodium bicarbonate transporter like protein 11
Locus ID:	83959
Components:	<b>KN222743G1</b> , Sodium bicarbonate transporter like protein 11 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGTTCCATCTGCAGCCGTG <b>KN222743G2</b> , Sodium bicarbonate transporter like protein 11 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGTGGGTGCCTGAACCCGG <b>KN222743D</b> , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

#### Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGCG
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCACAT TTCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTGCGG TCGCGCGTTT CGGTGATGAC
GGTGAAAACC TCTGACACAT GCAGTCCCG TTGACGGTCA CAGTTGTCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCACTA CGTGAACCAT CACCCAAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCTAAAG GGAGCCCCG ATTTAGAGCT TGACGGGGAA
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AGCGGTCACG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GTACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATGCGT AAGGAGAAAA TACCGCATCA GCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGCCTCTT CGCTATTACG CCAGCTGGCG
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AAAGGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTTC CCAGTCACGA CGTTGTAAAA  
 CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA  
 CCTGTCTAGT **CAGTCGGGGC** GCGCTTCCTG **GAGGAGGAG** AGAAGGACTT **GCGGCCGGAG** CTACCGGGAT  
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 GCCGGCCGCG TACTTAAAGC **GGACGCGGGG** GAAGCCCTCC **CGGGTCTGCG** CTCAGTCGCA CAGCTCGGTG  
 GGCTCGTGGC **GCAGTCGAAC** GTTTTCCAG **AAGCTCCCCG** GCCCCGTCCA **GCCCTAAAC** TCGCGACGCT  
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 GTCTCCGTC **GGGACCCCG** GGGAGAACGC **GGATGCCGTC** TGCCTGCGCG **GGCCGGGGCC** GGTGGGCGAG  
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 ACCGCGCGCT **TGGTTTCATT** AGGGCTCTGC **TGTCGCCGTC** TTGAATTTCT **TACCAGGTTT** GAACAGCTGA  
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CCCGTCCGGC GCCGCGGTGG GAGCCCCGGA ACCCCTGGAG TTTTGGGAGT CCCGGGACCC CTGACCGTGC
CCTGCGCGGC CGCAGCGGTT TCTCCCTTGC TCTGACACGG GAGGGCCAGC CCTGGGTCCC CGCCAGGACC
CAGGTTTGTG CGACCCTTTA CCTGCACGTG GGCCGCCGGG ACGGAAGCGG AGTGTGCACC GGCCCAACCC
TCCAGACCC TCGTCGCCCT CCACAGTCTT CACTGACTGA CTGACTGGAA AGAGGAAGGG CTGGAAGAGG
AAGGAGCTTG GCGTAATCAT GGTTCATAGT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC AATCCACAC
AACATACGAG CCGGAAGCAT AAAGGTAAA GCCTGGGGTG CCTAATGAGT GAGCTAACTC ACATTAATTG
CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAAATGAA TCGGCCAACG
CGCGGGGAGA GCGGTTTTGC GTATTGGGCG CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC
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CCGACAGGAC TATAAGATA CCAGGCGTTT CCCCTGGAA GCTCCCTCGT GCGCTCTCCT GTTCCGACCC
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GACCGCTCGC CTTATCCGG TAACTATCGT CTTGAGTCCA ACCCGTAAG ACACGACTTA TCGCCACTGG
CAGCAGCCAC TGTAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
GCCTAACTAC GGCTACTACTA GAAGAACAGT ATTTGGTATC TGCGCTCTGC TGAAGCCAGT TACCTTCGGA
AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG TGGTTTTTTT GTTTGCAAGC
AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT CTGACGCTCA
GTGGAACGAA AACTCACGTT AAGGGATTTT GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT
TTAAATTTAA AATGAAGTTT TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT
GCTTAATCAG TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCT GACTCCCCGT
CGTGTAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGTG CAATGATACC GCGAGAACCA
CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA AGTGGTCTG
CAACTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA
TAGTTTGGCG AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
TTCAGCTCCG GTTCCCAACG ATC

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**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.

**RefSeq:**

[NM\\_001174089](#), [NM\\_001174090](#), [NM\\_032034](#), [NR\\_135000](#), [NM\\_001363745](#)

**UniProt ID:**

[Q8NBS3](#)

**Synonyms:**

BTR1; CDPD1; CHED2; dj794I6.2; NABC1

**Summary:**

This gene encodes a voltage-regulated, electrogenic sodium-coupled borate cotransporter that is essential for borate homeostasis, cell growth and cell proliferation. Mutations in this gene have been associated with a number of endothelial corneal dystrophies including recessive corneal endothelial dystrophy 2, corneal dystrophy and perceptive deafness, and Fuchs endothelial corneal dystrophy. Multiple transcript variants encoding different isoforms have been described. [provided by RefSeq, Mar 2010]

Product images:

