

Data Sheet for Over Expressed Cell Line for CLCA4:

Cell ID: IDG-HEK293T-CLCA4-V5-OE

Cell Type: Stable overexpression cell line

Cryopreservation:

Freeze in complete growth medium supplemented with 10% (v/v) DMSO

Culture Conditions:

Complete Growth Medium. The base medium for this cell line is either DMEM or a-RPMI 1640 with 10% fetal bovine serum.

Description: This cell line stably expresses dark ion channel in frame with V5 tag on the C-terminus. The ion channel construct is randomly integrated in the genome using lentiviral transduction. This cell line also expresses gene conferring Blasticidin resistance. These cells lines can be used for various molecular and biochemical characterizations of dark ion channels in vitro.

Gene Name: CLCA4

ORF Sequence:

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ATGGGGTTATTCAGAGGTTTTGTTTTCCCTCTTAGTTCTGTGCCTGCTGCACCAGTCAAATACTTCCTTCATT  
TAATAATGGCTTTGAAGATATTGTCATTGTTATAGATCCTAGTGTGCCAGAAGATGAAAAATAATTGAAC  
ATATGGTGACTACAGCTTCTACGTACCTGTTTGAAGCCACAGAAAAAAGATTTTTTTTCAAAAATGTATCTA  
CCTGAGAATTGGAAGGAAAATCCTCAGTACAAAAGGCCAAAACATGAAAACCATAAACATGCTGATGTTA  
ACCTACACTCCCAGGTAGAGATGAACCATAACCAAGCAGTTCACAGAATGTGGAGAGAAAGGCGAATAAC  
CCCCTGACCTTCTACTTGGAAAAAAACAATAATGAATATGGACCACCAGGCAAACCTGTTTGTCCATGAGTGC  
CGGTGGGGAGTGTGTTGATGAGTACAATGAAGATCAGCCTTTCTACCGTGCTAAGTCAAAAAAATCGAAG  
TTCCGCAGGTATCTCTGGTAGAAATAGAGTTTATAAGTGTCAAGGAGGCAGCTGTCTTAGTAGAGCATGCA  
CTACAACAAAACCTGTATGGAAAAGATTGTCAATTCTTTCCCTGATAAAGTACAAACAGAAAAAGCATCCAT  
CAAAGTATTGATTCTGTTGTTGAATTTTGTAAACGAAAAAACCCATAATCAAGAAGCTCCAAGCCTACAAA  
CAATTTTAGAAGTACATGGGAGGTGATTAGCAATTCTGAGGATTTTAAAAACACCATAACCCATGGTGACAG  
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GACCGCCTAAATCGAATGAATCAAGCAGCAAAACATTTCCCTGCTGCAGACTGTTGAAAATGGATCCTGGG  
TCACTTTGATAGTACTGCCACTATTGTAATAAGCTAATCCAAATAAAAAGCAGTGATGAAAGAAACACA  
GATTACCTACATACCTCTGGGAGGAACTTCCATCTGCTCTGGAATTAATATGCATTTTCAGGTGATTGGAC  
TCCCAACTCGATGGATCCGAAGTACTGCTGCTGACTGATGGGGAGGATAAACTGCAAGTTCTTGATTGA  
ACAAAGTGGGGCCATTGTTCATTTTATTGCTTTGGGAAGAGCTGCTGATGAAGCAGTAATAGAGATGAGCA  
GAGGAAGTCATTTTTATGTTTCAGATGAAGCTCAGAACAATGGCCTCATTGATGCTTTTGGGGCTCTTACA  
ACTGATCTCTCCAGAAGTCCCTTCAGCTCGAAAGTAAGGGATTAACACTGAATAGTAATGCCTGGATGAA  
CATAATTGATAGTACAGTGGGAAAGGACACGTTCTTTCTCATCACATGGAACAGTCTGCCTCCCAGTATTT  
ATCCCAGTGGAAACAATAATGGAAAATTTACAGTGGATGCAACTTCCAAAATGGCCTATCTCAGTATTCCA  
AAGGTGGGCACTTGGGCATACAATCTTCAAGCCAAAGCGAACCCAGAAACATTA ACTATTACAGTAACTT
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AAATTCTTCTGTGCCTCCAATCACAGTGAATGCTAAAATGAATAAAGGACGTAAACAGTTTTCCCAGCCCAA
ACGCAGAAATTCTACAAGGATATGTACCTGTTCTTGGAGCCAATGTGACTGCTTTCATTGAATCACAGAAT
GAAGTTTTGGAACCTTTTGGATAATGGTGCAGGCGCTGATTCTTTCAAGAATGATGGAGTCTACTCCAGGTA
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CACTGAATAGAGCCGCGTATATAACCAGGCTGGGTAGTGAACGGGGAAATTGAAGCAAACCCGCCAAGACC
GAGGATACTCAGACCACCTTGGAGGATTTTCAGCCGAACAGCATCCGGAGGTGCATTTGTGGTATCACAAGT
TCCCTTGCCTGACCAATACCCACCAAGTCAAATCACAGACCTTGATGCCACAGTTCATGAGGATAAGATTA
GGACAGCACCAGGAGATAATTTTGGATGTTGGAAAAGTTCAACGTTATATCATAAGAATAAGTGCAAGTAT
AGAGACAGTTTTGATGATGCTCTTCAACTAAATACTACTGATCTGTCACCAAAGGAGGCCAACTCCAAGGA
ATTTAAACCAGAAAATATCTCAGAAGAAAATGCAACCCACATATTTATTGCCATTA AAAAGTATAGATAAAA
CATCAAAGTATCCAACATTGCACAAGTAACTTTGTTTATCCCTCAAGCAAATCCTGATGACATTGATCCTA
CCTACTCCTACTCCTGATAAAAGTCATAATTCTGGAGTTAATATTTCTACGCTGGTATTGTCTGTGATTGGG
AATTGTAACTTTATTTTAAGTACCACCATTTTGCCAACCTTTCTTGTACAAAGTGGTTGGTAAGCCTATCCC
TCCTCGGTCTCGATTCTACGTAG

Parent Cell Line: HEK293

Quantity: 1 vial of $\sim 1 \times 10^6$ cells; froze

Thawing Procedure:

The cells must be thawed in a 37 °C water bath under 2 min. Using aseptic technique, add the contents of the vial to 9 ml of complete growth medium, centrifuge for 5 min at 125 x g. Aspirate the medium, and resuspend in 10 mL of complete growth medium, and place into a culture vessel of your choice. Only add selection antibiotic to the medium after 24 hours in culture.