Data Sheet for Over Expression Cells for KCNAB2:

Cell ID: IDG-HEK293T-KCNAB2-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.   Single cell clones: A5, G8 Subcellular localization: Membrane + Cytoplasm

Gene Name: KCNAB2

ORF Sequence:
ATGTATCCAGAATCAACGACGGGCTCCCCGGCTCGGCTCTCGCTGCGGCAGACGGGCTCCCCCGGGATGA
TCGGTATGGGAGTCCCAAAAGACAGCTCCAGTTTTACAGGAACCTGGGCAAGTCTGGCCTGCGGGTCTCC
TTGGAACATGGGTGACCTTCGGAGGCCAGATCACCGATGAGATGGCAGAGCAGCTCATGACCTTGGCCTA
ATCAACCTCTTCGATACAGCAGAAGTCTACGCAGCCGGCAAGGCTGAAGTGGTACTGGGAAACATCATTA
ATGGAGGCGGTCCAGCCTCGTCATCACCACCAAGATCTTCTGGGGCGGAAAGGCGGAGACGGAGCGGGG
AGCACATAATCGAAGGTCTGAAAGCTTCCCTGGAGCGACTGCAGCTGGAGTACGTGGATGTGGTGTTTGC
GACCCCAACACCCCGATGGAAGAGACCGTCCGCGCCATGACCCACGTCATCAACCAGGGGATGGCCATGT
GTCACGCTGGAGCTCCATGGAGATCATGGAGGCCTACTCCGTGGCCCGGCAGTTCAACCTGACCCCGCCCA
AGGCTGAGTACCACATGTTCCAGCGTGAGAAAGTGGAGGTGCAGCTGCCGGAGCTGTTCCACAAGATAGG
ATGACCTGGTCCCCTCTGGCCTGTGGCATTGTTTCTGGCAAGTACGACAGTGGCATCCCACCCTACTCAAG
GAAGGGCTACCAGTGGCTGAAGGACAAGATCCTCAGTGAGGAGGGCCGGCGCCAGCAAGCCAAGCTGAA
CCATCGCCGAGCGCCTGGGCTGCACCCTGCCCCAGCTGGCCATAGCCTGGTGCCTGAGGAATGAGGGAGT
CTCCTGGGGGCCTCCAATGCGGACCAGCTCATGGAGAACATTGGGGCAATACAGGTCCTTCCGAAACTGT
TATCCACGAGATTGATAGTATTTTGGGCAATAAACCCTACAGCAAAAAGGACTACAGATCCTTGCCAACTT
AAGTGGTTGGTAAGCCTATCCCTAACCCTCTCCTCGGTCTCGATTCTACGTAG

Parent Cell Line: HEK293

Quantity: 1 vial of ~1 x 106 cells; froze

Thawing Procedure:

The cells must be thawed in a 37 0C 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.