Data Sheet for Over Expressed Cell Line for TMEM63B:

Cell ID: IDG-HEK293T-TMEM63B-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: TMEM63B

ORF Sequence:
ATGCTGCCCTTTCTGCTGGCCACACTGGGCACCACAGCCCTCAACAACAGCAACCCCAAGGACTACTGCTA
CATCCGCAGCACTGTCCTGCAGGGCCTGCCCTTTGGGGGCGTCCCCACCGTGCTGGCTCTCGACTTCATGTC
CACTGCTGTTCTTATTCTCTATCCTCCGGAAGGTGGCCTGGGACTATGGGCGGCTGGCCTTGGTGACAGATC
CTTCGGCGGCAGGAGAGGGACCGAGTGGAACAGGAATATGTGGCTTCAGCTATGCACGGGGACAGCCATC
GCGTCTCACCTCTGTCTCCAGCTCCGTTGACTTTGACCAAAGGGACAATGGTTTCTGTTCCTGGCTGACAGC
GGATAAAGGATGATGAGATCCGGGACAAATGTGGGGGCGATGCCGTGCACTACCTGTCCTTTCAGCGGCA
CTGCTGGTGGTTGTGGGCGTCCTCTCCGTAGGCATCGTGCTGCCTGTCAACTTCTCAGGGGACCTGCTGGAC
CTACAGCTTTGGGAGAACCACCATTGCCAACTTGAAATCAGGGAACAACCTGCTATGGCTGCACACCTCCT
TGTATCTGCTGCTCACCGTCTACAGCATGCGTAGACACACCTCCAAGATGCGCTACAAGGAGGATGATCTG
ACCCTCTTCATCAATGGAATCTCCAAATATGCAGAGTCAGAAAAGATCAAGAAGCATTTTGAGGAAGCCTA
CACAGTTCTCGAAGCCCGCCCGTGTTACAACGTGGCTCGCCTAATGTTCCTCGATGCAGAGAGGAAGAAGC
GAAAGCTGTACTTCACAAACCTCCAGAGCAAGGAGAACGTGCCTACCATGATCAACCCCAAGCCCTGTGG
TGCTGTGTGGTGCGAGGCTGTGAGCAGGTGGAGGCCATTGAGTACTACACAAAGCTGGAGCAGAAGCTGA
CAAGCGGGAGAAGGAGAAGGTGAATGAGAAGCCTCTTGGCATGGCCTTTGTCACCTTCCACAATGAGACT
TCATCCTGAAGGACTTCAACGTGTGTAAATGCCAGGGCTGCACCTGCCGTGGGGAGCCACGCCCCTCATCC
TCCCTGCACATCTCCAACTGGACCGTGTCCTATGCCCCTGACCCTCAGAACATCTACTGGGAGCACCTCTCC
CTTCATCTGGTGGCTGCGCTGCCTGGTCATCAATGTCGTCCTCTTCATCCTCCTCTTCTTCCTCACCACTCCA
TCATCACCACCATGGACAAGTTCAACGTCACCAAGCCTGTGGAGTACCTCAACAACCCCATCATCACCCAC
ACCCTGCTGCTGTGGTGCTTCTCGGCCCTCCTTCCCACCATCGTCTACTACTCAGCCTTCTTTGAAGCCCAC
CTCTGGGGAGAACAGGACAACCATGCACAAGTGCTACACTTTCCTCATCTTCATGGTGCTGCTCCTACCCTC
TGAGCAGCCTGGACCTCTTCTTCCGCTGGCTCTTTGATAAGAAATTCTTGGCTGAGGCAGCTATTCGGTTTC
TTCCTGCCCGACAACGGCGCCTTCTTCGTGAACTACGTCATTGCCTCAGCCTTTATCGGCAACGCCATGGAC

CATCCCAGGCCTGCTCATGTACATGATCCGGCTCTGCCTGGCGCGCTCGGCCGCCGAGAGGCGCAACGTGA
AGGCCTACGAGTTCCAGTTTGGCGCAGCCTACGCCTGGATGATGTGCGTCTTCACGGTGGTCATGACCTAC
TGCCCCATCATCGTGCCCTTCGGGCTCATGTACATGCTGCTGAAGCACCTGGTAGACAGGTACAATCTCTA
CCTGCCGGCCAAGCTGGACAAGAAGATCCACTCGGGGGCTGTGAACCAGGTGGTGGCCGCGCCCATCCTC
GGCTGCTCTTCTTTTCCACCATGCGCACGGGGTTCCTAGCTCCCACGTCTATGTTCACATTTGTGGTCCTGG
ATCGTCATCTGTCTCTGCCACGTCTGCTTTGGACACTTCAAATACCTCAGTGCCCACAACTACAAGATTGAC
GACAGATACTGTGGACCCCAGAAGCAATGGACGGCCCCCCACTGCTGCTGCTGTCCCCAAATCTGCGAAAT
AGGTGCTGCAGGACTCAGAGGTGGACGGGGATGGGGATGGGGCTCCTGGGAGCTCAGGGGATGAGCCCCC
TCCCAAGATGAGGAGTTGCTGATGCCACCCGACGCCCTCACGGACACAGACTTCCAGTCTTGCGAGGACAC
GAATGAGATTCACCAGACAGCTTTCTTGTACAAAGTGGTTGGTAAGCCTATCCCTAACCCTCTCCTCGGTCT
CGTAG

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.