

# Data Sheet for Over Expression Cells for CACNB1:

Cell ID: IDG-HEK293T-CACNB1-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. &nbsp; Single Cell Clones: &nbsp; H3-- Low Membraneous V5 expression

Gene Name: CACNB1

ORF Sequence:

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ATGTCCCGGGGCCCTTACCCACCCTCCCAGGAGATCCCCATGGAGGTCTTCGACCCCAGCCCGCAGGGGCAA  
GAGGAAAGGGCGATTCAAACGGTCAGATGGGAGCACGTCTCGGATAACCACATCCAACAGCTTTGTCCGC  
CGGAGTCTACACCAGCCGTCCATCAGACTCTGATGTATCTCTGGAGGAGGACCGGGAAGCCTTAAGGAA  
CGCCAGGCATTAGCGCAGCTCGAGAAGGCCAAGACCAAGCCAGTGGCATTGCTGTGCGGACAAATGTTG  
GTCTCCAGGGGATGAGGTGCCTGTGCAGGGAGTGGCCATCACCTTCGAGCCCAAAGACTTCTGCACATCA  
ACAATAATGACTGGTGGATCGGGCGGCTGGTGAAGGAGGGCTGTGAGGTTGGCTTCATTCCCAGCCCCGT  
AGCCTTCGCCTGCTGCAGGAACAGAAGCTGCGCCAGAACCGCCTCGGCTCCAGCAAATCAGGCGATAACT  
TCTGGGAGATGTGGTACTGGCACCCGCCGCCACACCCCTGCCAGTGCCAAACAGAAGCAGAAGTCG  
TGCCCCCTATGACGTGGTGCCTTCCATGAGGCCCATCATCCTGGTGGGACCGTCGCTCAAGGGCTACGAG  
ATGATGCAGAAAGCTTTATTTGACTTCTTGAAGCATCGGTTTGATGGCAGGACCTCCATCACTCGTGTGAC  
TTCCCTGGCTAAGCGCTCAGTTCTCAACAACCCAGCAAACACATCATCATTGAGCGCTCCAACACACGCT  
CTGAGGTGCAGAGTGAAATCGAGCGAATCTTCGAGCTGGCCCGGACCCCTTCAGTTGGTCGCTCTGGATGCT  
AATCACCCAGCCCAGCTGTCCAAGACCTCGCTGGCCCCATCATTGTTTACATCAAGATCACCTCTCCCAA  
AAGGCTCATCAAGTCCCGAGGAAAGTCTCAGTCCAAACACCTCAATGTCCAAATAGCGGCCTCGGAAAAG  
GCCACCCTGAAATGTTTGACATCATCCTGGATGAGAACCAATTGGAGGATGCCTGCGAGCATCTGGCGGAC  
GCCTATTGGAAGGCCACACACCCGCCAGCAGCACGCCACCCAATCCGCTGCTGAACCGCACCATGGCTA  
GGCTGCCAGCCCTGCCCTGTCTCCAACCTCCAGGGACCCTACCTTGCTTCCGGGGACCAGCCACTGGAAC  
GGGAGCACGCCAGCATGCACGAGTACCCAGGGGAGCTGGGCCAGCCCCAGGCCTTTACCCAGCAGCCA  
CGGGCAGGCACGCTACGGGCACTGTCCCGCCAAGACACTTTTGATGCCGACACCCCGGCAGCCGAAACT  
GGAGCTGGGAGACTCATGTGTGGACATGGAGACTGACCCCTCAGAGGGGCCAGGGCTTGGAGACCCTGCA  
CGCCCCAGCCCGACAGGGATCCTGGGAGGACGAGGAAGAAGACTATGAGGAAGAGCTGACCGACAACC
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CGGAATAAGGCCCGCTACTGCGCTGAGGGTGGGGGTCCAGTTTTGGGGCGCAACAAGAATGAGCTGGAGC  
AGGCGTCTACATTCGCTGCCCAACTTTCTTGTACAAAGTGGTTGGTAAGCCTATCCCTAACCTCTCCTCGC  
CTACGTAG

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.