

## **Product datasheet for MC211083**

## Dnajb14 (NM\_001033155) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Tag: Tag Free

Symbol: Dnajb14

**Synonyms:** 5730496F10Rik

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC211083 representing NM\_001033155

Red=Cloning site Blue=ORF Orange=Stop codon

GGAAATAATTATGAAAAACGGCAGCACCGCTGGAAGTAGCACGCATTGCCGAAAACCTCCTGGGAGCAGC GACCAGAGCAAGCCCAGCTGTGGAAAGGACGGCACTTCTGGTGCTGGGGAAGGCGGGAAAGTCTATACCA AAGACCAAGTAGAGGGCGTGCTCAGCATAAACAAATGTAAAAAATTACTACGAAGTCCTCGGAGTTACAAA CACGCCCCTGGAGCCACGGATGCTTTCAAAAAGATTGGAAACGCTTACGCCGTCCTAAGCAATCCAGAGA AACGAAAACAGTATGACCTCACAGGCAGTGAAGAGCAAGCCTGTAACCACCAGAACAACGGCAGGTTCAA TTTCCACCGGGGCTGTGAGGCCGACATAACTCCCGAAGACCTGTTCAATATCTTCTTTGGCGGTGGATTT CCTTCAGGTAGTGTACATTCATTTTCAAATGGCCGGGCTGCTTACAGCCATCAACATCAGCACCGACACA TGTGCTGATCCTTGTGTCCTTGTTAAGCCAGCTGATGGTCTCGAACCCTCCGTACTCCTTATACCCCAGA TCTGGATCAGGACAAACTATTAAAATGCAGACAGAAAACTTGGGTGTTTATTACGTCAGTAAGGACT TTAAAAGCGAATATAAAGGAACACTATTACAAAAAGTAGAAAAGGTGTGGAAGAGGATTACGTGACTAA TATTCGAAATAACTGCTGGAAAGAAAGACAGCAGAAAACAGATATGCAGTATGCAGCCAAAGTGTACCGT GATGAGCAGCTGCGGAGGAAGGCGGATGCCCTGAGCATGGAGAACTGCAAGGAGCTAGAGCGGCTGACCA **GTCTCTACAAGGGGGGATAA** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



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## Dnajb14 (NM\_001033155) Mouse Untagged Clone | MC211083

Restriction Sites: Sgfl-Mlul

**ACCN:** NM\_001033155

Insert Size: 1140 bp

Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um

filter is required.

**RefSeq:** <u>NM\_001033155.1</u>, <u>NP\_001028327.1</u>

RefSeq Size: 1851 bp

RefSeq ORF: 1140 bp

**Locus ID:** 70604

UniProt ID: Q149L6

Cytogenetics: 3 G3





## Gene Summary:

Acts as a co-chaperone with HSPA8/Hsc70; required to promote protein folding and trafficking, prevent aggregation of client proteins, and promote unfolded proteins to endoplasmic reticulum-associated degradation (ERAD) pathway. Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities. Can also act independently of HSPA8/Hsc70: together with DNAJB12, acts as a chaperone that promotes maturation of potassium channels KCND2 and KCNH2 by stabilizing nascent channel subunits and assembling them into tetramers. While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70. When overexpressed, forms membranous structures together with DNAJB12 and HSPA8/Hsc70 within the nucleus; the role of these structures, named DJANGOs, is still unclear. [UniProtKB/Swiss-Prot Function]