

Product datasheet for **RC236458**

CIB2 (NM_001301224) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CIB2 (NM_001301224) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CIB2
Synonyms: DFNB48; KIP2; USH1J
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236458 representing NM_001301224
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGGAACAAGCAGACCATCTTACCGAAGAGCAGCTAGACAACCTACCAGGACTGCACCTTCTTCAATA
AGAAGGACATCTCAAATGGGGAACCGAGGCTCAGAGGGATTTGGTCACTCCTCCAGGGTCACACAGGC
TGTCACAGTCTGGCTCCGGGGCCCTCCTGCTTATCCTGCACCCACAGTGATTGCTGTGTGTGTTTTCTT
CAGGAGAAATCCCTTCAAAGAAAGGATCGTGCGCGGTTTTCCGAGGATGGTGAGGGGAACCTCACTTTCA
ACGACTTTGTGGACATGTTTTCCGTGCTCTGCGAGTCCGGCTCCCCGAGAGCTCAAGGCAAATATGCCTT
CAAGATCTATGACTTCAACTGACAATTCATCTGCAAGGAGGACCTGGAGCTGACGCTGGCCCCGGCTC
ACTAAGTCAGAGCTGGATGAGGAGGAGTGGTGTGTGTGCGACAAGGTCATTGAGGAGGCTGACTTGG
ACGGTGACGGCAAGCTGGGCTTTGCTGACTTCGAGGACATGATTGCCAAGGCCCTGACTTCCTCAGCAC
TTCCACATCCGGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236458 representing NM_001301224
Red=Cloning site Green=Tags(s)

MGNKQITFEEQLDNYQDCTFFNKKDILKWGNRGSEGFHSSRVTVAVHSLAPGPSCLSTHSDCCVCFLL
QENPFKERIVAAFSEDEGNLTFNDFVDMFVSLCESAPRELKANYAFKIYDFNTDNFICKEDLELTLARL
TKSELDEEEVVLVCDKVIIEADLDGDGKLGADFEDMIAKAPDFLSTFHIRI

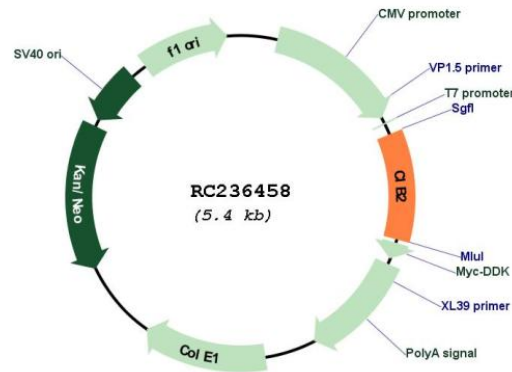
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001301224

ORF Size: 576 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

RefSeq: [NM_001301224.2](#)

RefSeq Size: 1638 bp

RefSeq ORF: 579 bp

Locus ID: 10518

UniProt ID: [O75838](#)

Cytogenetics: 15q25.1

Protein Families: Druggable Genome

MW: 22.1 kDa

Gene Summary: The protein encoded by this gene is similar to that of KIP/CIB, calcineurin B, and calmodulin. The encoded protein is a calcium-binding regulatory protein that interacts with DNA-dependent protein kinase catalytic subunits (DNA-PKcs), and it is involved in photoreceptor cell maintenance. Mutations in this gene cause deafness, autosomal recessive, 48 (DFNB48), and also Usher syndrome 1J (USH1J). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]