

Product datasheet for MR228359

Cib1 (NM_001291275) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cib1 (NM_001291275) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cib1
Synonyms: Cibkip; Kip; Prkdcip
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR228359 representing NM_001291275
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGGAGGTTTCGGGCAGTCGCCTGTCTAAGGAGCTGCTGGCCGAGTACCAGGACCTGACGTTCTGACCA
 AGCAGGAGATCCTCTAGCCACAGACGCTTTGTGAGCTGCTTCCCCAGAGCAGCGGACCGTGGAGGA
 GTCAGTGCACACCCGAGTATCGTTTGAGCAGATCCTCAGCCTCCAGAGCTCAAGGAGCGAATCTGCATG
 GTCTTCTCCACATCACCTACCAGAGACAGCCTGAGCTTTGAGGACTTCTGGACCTCCTGAGTGTCTTCA
 GTGACACAGCAACCCAGACATCAAGTCACACTATGCCTTCCGCATCTTTGACTTTGATGACGATGGAAC
 CCTGGACAGAGAAGACCTGAGCCAGCTTGTGAATTGCCTCACGGGAGAGGGCGAGGACACTCGGCTCAGT
 GCTTCTGAGATGAAGCAGCTGATTGACAATATCCTGGAAGAGTCAGACATTGACAGGGATGGGACCATCA
 ATCTTTCCGAGTCCAGCATGTCATCTCGCGCTCACCAGACTTTGCCAGCTCCTTTAAGATTGTCCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228359 representing NM_001291275
 Red=Cloning site Green=Tags(s)

MGGSGSRLSKELLAELYQDLTFLTKQEILLAHRRFCELLPPEQRTVEESLHTRVSFEQILSLPELKERICM
 VFSTSPTRDSLSEDFLDLLSVFSDTATPDIKSHYAFRIFDFDDGTLDRDLSQLVNCLTGEDEDRLS
 ASEMQLIDNILEESDIDRDGTINLSEFQHVISRSPDFASSFKIVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:


ACCN: NM_001291275

ORF Size: 558 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.

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

RefSeq: [NM_001291275.1](#), [NP_001278204.1](#)

RefSeq Size: 1040 bp

RefSeq ORF: 561 bp

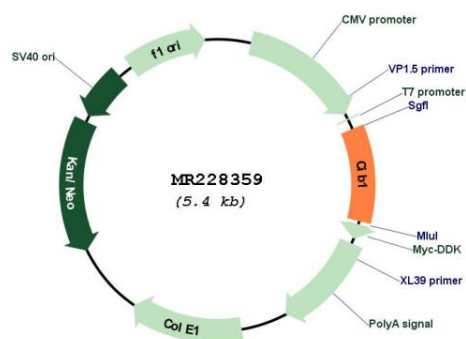
Locus ID: 23991

UniProt ID: Q9Z0F4

Cytogenetics: 7 D2

MW: 21.7 kDa

Gene Summary: Calcium-binding protein that plays a role in the regulation of numerous cellular processes, such as cell differentiation, cell division, cell proliferation, cell migration, thrombosis, angiogenesis, cardiac hypertrophy and apoptosis. Involved in bone marrow megakaryocyte differentiation by negatively regulating thrombopoietin-mediated signaling pathway. Participates in the endomitotic cell cycle of megakaryocyte, a form of mitosis in which both karyokinesis and cytokinesis are interrupted. Plays a role in integrin signaling by negatively regulating alpha-IIb/beta3 activation in thrombin-stimulated megakaryocytes preventing platelet aggregation. Up-regulates PTK2/FAK1 activity, and is also needed for the recruitment of PTK2/FAK1 to focal adhesions; it thus appears to play an important role in focal adhesion formation. Positively regulates cell migration on fibronectin in a CDC42-dependent manner, the effect being negatively regulated by PAK1. Functions as a negative regulator of stress activated MAP kinase (MAPK) signaling pathways. Down-regulates inositol 1,4,5-trisphosphate receptor-dependent calcium signaling. Involved in sphingosine kinase SPHK1 translocation to the plasma membrane in a N-myristoylation-dependent manner preventing TNF-alpha-induced apoptosis. Regulates serine/threonine-protein kinase PLK3 activity for proper completion of cell division progression. Plays a role in microtubule (MT) dynamics during neuronal development; disrupts the MT depolymerization activity of STMN2 attenuating NGF-induced neurite outgrowth and the MT reorganization at the edge of lamellipodia. Promotes cardiomyocyte hypertrophy via activation of the calcineurin/NFAT signaling pathway. Stimulates calcineurin PPP3R1 activity by mediating its anchoring to the sarcolemma. In ischemia-induced (pathological or adaptive) angiogenesis, stimulates endothelial cell proliferation, migration and microvessel formation by activating the PAK1 and ERK1/ERK2 signaling pathway. Promotes also cancer cell survival and proliferation. May regulate cell cycle and differentiation of spermatogenic germ cells, and/or differentiation of supporting Sertoli cells.[UniProtKB/Swiss-Prot Function]



This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
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