

Product datasheet for RC202825

CIAO2B (NM_016062) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CIAO2B (NM_016062) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CIAO2B
Synonyms:	CGI-128; CIA2B; FAM96B; MIP18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202825 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGTAGGCGGCGGGGTGCGCGGCGCCTCCTGGAGAATGCCAACCCCTCATCTACCAGCGCTCTG
 GGGAGCGGCTGTGACGGCAGGCGAGGAGGACGAGCAGGTTCCCGACAGCATCGACGCACGCGAGATCTT
 CGATCTGATTGCTCCATCAATGACCCGAGCATCCACTGACGCTAGAGGAGTTGAACGTAGTAGAGCAG
 GTGCGGGTTCAGGTTAGCGACCCGAGAGTACAGTGGCTGTGGCTTTCACACCAACCATTCGCACTGCA
 GCATGGCCACCCTTATTGGTCTGTCCATCAAGGTCAAGCTTCTGCGCTCCCTTCCTCAGCGTTTCAAGAT
 GGACGTGCACATTACTCCGGGGACCCATGCCTCAGAGCATGCAGTGAACAAGCAACTGCAGATAAGGAG
 CGGGTGGCAGCTGCCCTGGAGAACACCCACCTCTTGGAGGTTGTGAATCAGTGCCTGTCAGCCCGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC202825 protein sequence Red=Cloning site Green=Tags(s)
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MVGGGGVGGGLENANPLIYQSRGPVTAGEEDEQVPDSIDAREIFDLIRSINDPEHPLTLEELNVVEQ
 VRVQVSDPESTVAVFTPTIPHCSMATLIGLSIKVKLLRSLPQRFKMDVHITPGTHASEHAVNKQLADKE
 RVAAALENTHLLEVNNQCLSARS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/mk6145_a04.zip
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016062

ORF Size: 489 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_016062.4](#)

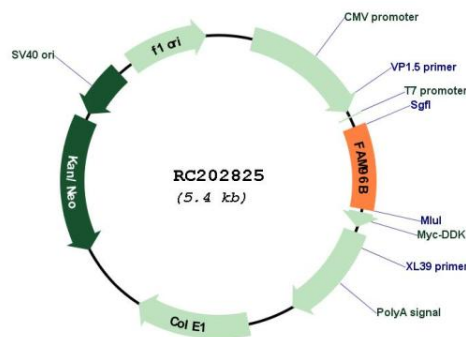
RefSeq Size: 716 bp

RefSeq ORF: 492 bp

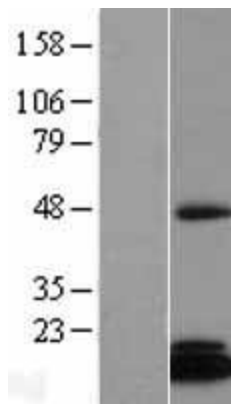
Locus ID: 51647
UniProt ID: [Q9Y3D0](#)
Cytogenetics: 16q22.1
MW: 17.7 kDa
Gene Summary:

Component of the cytosolic iron-sulfur protein assembly (CIA) complex, a multiprotein complex that mediates the incorporation of iron-sulfur cluster into extramitochondrial Fe/S proteins (PubMed:23891004, PubMed:22678362, PubMed:22678361). As a CIA complex component and in collaboration with CIAO1 and MMS19, binds to and facilitates the assembly of most cytosolic-nuclear Fe/S proteins (PubMed:23891004). As part of the mitotic spindle-associated MMXD complex it plays a role in chromosome segregation, probably by facilitating iron-sulfur cluster assembly into ERCC2/XPD (PubMed:20797633).
 [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC202825



Western blot validation of overexpression lysate (Cat# [LY402495]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202825 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).