

Product datasheet for RC203357

CIAO2A (NM_032231) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CIAO2A (NM_032231) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CIAO2A
Synonyms: CIA2A; FAM96A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203357 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGCAGCGGGTGTCCGGGCTGCTCTCCTGGACGCTGAGCAGAGTCTGTGGCTCTCCGGCCTCTCTGAGC
CGGGAGCTGCCCGGCAGCCCCGGATCATGGAAGAGAAAGCGCTAGAGGTTTATGATTTGATTAGAATAT
CCGGGACCCAGAAAAGCCCAATACTTTAGAAGAACTGGAAGTGGTCTCGAAAAGTTGTGTGGAAGTTCAG
GAGATAAATGAAGAAGAATATCTGGTTATTATCAGGTTACGCCAACAGTACCTCATTGCTCTTTGGCGA
CTCTTATTGGGCTGTGCTTAAGAGTAAACTTCAGCGATGTTTACCATTTAAACATAAGTTGAAATCTA
CATTTCTGAAGGAACCCACTCAACAGAAGAAGACATCAATAAGCAGATAAATGACAAAGAGCGAGTGGCA
GCTGCAATGGA AAAACCCCAACTTACGGGAAATTGTGGAACAGTGTGTCCTTGAACCTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203357 protein sequence
Red=Cloning site Green=Tags(s)
MQRVSGLLSWTLSRVLWLSGLSEPGAARQPRIMEEKALEVYDLIRTIRDPEKPNLLEELEVVSESCVEVQ
EINEEYLVIIIRFTPTVPHCSLALIGLCLRVKLRCLPFKHKLEIYISEGTHSTEEDINKQINDKERVA
AAMENPNLREIVEQCVLEPD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

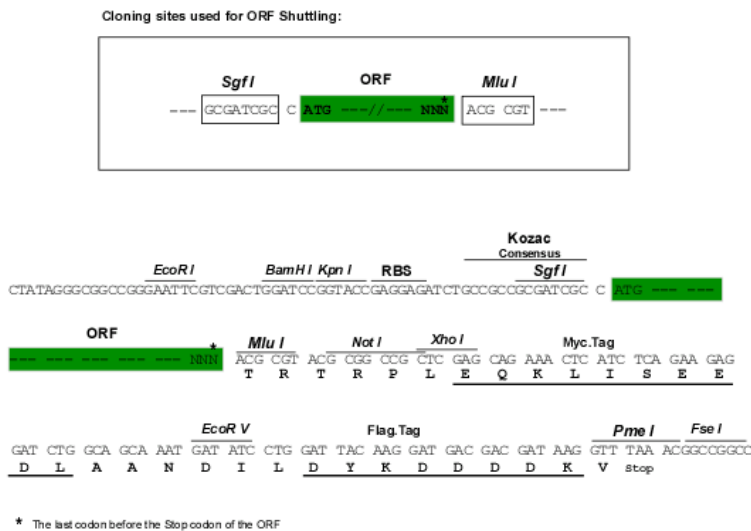
Chromatograms: https://cdn.origene.com/chromatograms/mk6079_b08.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032231

ORF Size: 480 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_032231.3](#)

RefSeq Size: 1114 bp

RefSeq ORF: 483 bp

Locus ID: 84191

UniProt ID: [Q9H5X1](#)

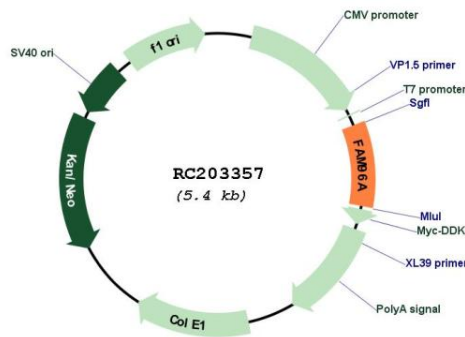
Cytogenetics: 15q22.31

Domains: DUF59

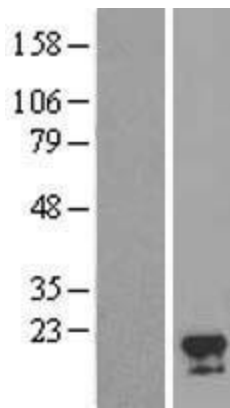
MW: 18.4 kDa

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). As a CIA complex component and in collaboration with CIAO1 specifically matures ACO1 and stabilizes IREB2, connecting cytosolic iron-sulfur protein maturation with cellular iron regulation (PubMed:23891004). May play a role in chromosome segregation through establishment of sister chromatid cohesion. May induce apoptosis in collaboration with APAF1 (PubMed:25716227).[UniProtKB/Swiss-Prot Function]

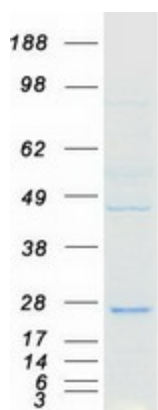
Product images:



Circular map for RC203357



Western blot validation of overexpression lysate (Cat# [LY410258]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203357 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CIAO2A protein (Cat# [TP303357]). The protein was produced from HEK293T cells transfected with CIAO2A cDNA clone (Cat# RC203357) using MegaTran 2.0 (Cat# [TT210002]).