

Product datasheet for RC221899

CIAO2A (NM 001014812) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CIAO2A (NM_001014812) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CIAO2A

Synonyms: CIA2A; FAM96A

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC221899 representing NM_001014812
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCAGCGGGTGTCCGGGCTGCTCTCCTGGACGCTGAGCAGAGTCCTGTGGCTCTCCGGCCTCTCTGAGCCGGGAGCTGCCCGGCAGCCCCGGATCATGGAAGAAAGCGCTAGAAGTTTATGATTTAGATTAGAACTATCCGGGACCCAGAAAAGCCCCAATACTTTAGAAGAACTGGAAGTGGTCTCGGAAAGTTGTGTGGAAGTTCAGGAGATAAATGAAGAAGAATATCTGGTTATTATCAGGTTCACGCCAACAGTACCTCATTGCTCTTTTGGCGA

CTCTTATTGTTGGAAATCTACATTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221899 representing NM_001014812

Red=Cloning site Green=Tags(s)

MQRVSGLLSWTLSRVLWLSGLSEPGAARQPRIMEEKALEVYDLIRTIRDPEKPNTLEELEVVSESCVEVQ

EINEEEYLVIIRFTPTVPHCSLATLIVGNLHF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

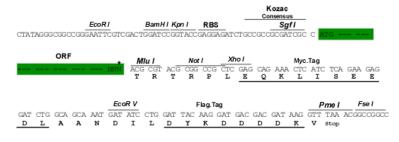
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



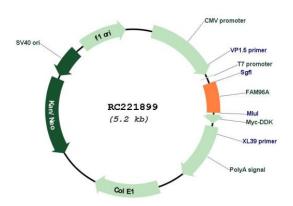
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001014812

ORF Size: 306 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



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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: <u>NM 001014812.2</u>

 RefSeq Size:
 1058 bp

 RefSeq ORF:
 309 bp

 Locus ID:
 84191

 UniProt ID:
 Q9H5X1

 Cytogenetics:
 15q22.31

 MW:
 11.5 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]