

Product datasheet for **RC209532**

BOLA1 (NM_016074) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: BOLA1 (NM_016074) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: BOLA1
Synonyms: CGI-143
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC209532 representing NM_016074
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGAGTGGCGGCTGGTCTGGTCTCCATGGCTGGCCGCGTTTGTGGCCAGGGCAGCG
CGGGATCCGGGGCCATCGGTCCGGTGGAGGCCGCCATTCGCACGAAGTTGGAGGAGGCCCTGAGCCCCGA
GGTGTAGAGCTTCGCAACGAGAGCGGTGGCCACGCGGTCCCGCTGGCAGTGAGACTCACTTCCGCGTG
GCTGTGGTGAAGCTCTCGTTTCGAGGGACTGAGCCCCCTACAACGACACCGGCTGGTCCACGCAGCGCTGG
CCGAGGAGCTGGGAGTCCGGTCCATGCGCTGGCCATCCAGGCACGGACCCCGCCAGTGGAGAGAGAA
CTCTCAGCTGGACACTAGCCCCCATGCCTGGGTGGGAACAAGAAACTCTAGGAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209532 representing NM_016074
Red=Cloning site Green=Tags(s)
MLSGRLVLGLVSMAGRVCLCQGSAGSGAIGPVEAAIRTKLEEAL SPEVLELRNESGGHAVPPGSETHFRV
AVYSSRFEGLSPLQRHRLVHAALAEELGGPVHALAIQARTPAQWRENSQLDTSPPCLGGNKKTLGTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1444_b02.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_016074

ORF Size: 411 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_016074.5](#)

RefSeq Size: 812 bp

RefSeq ORF: 414 bp

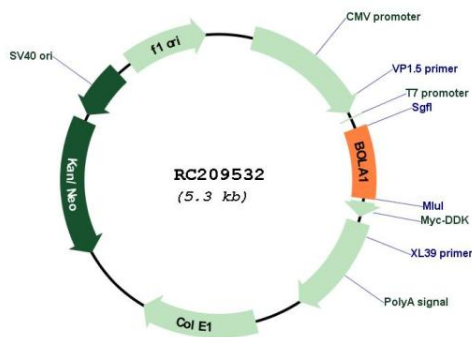
Locus ID: 51027

UniProt ID: [Q9Y3E2](#)

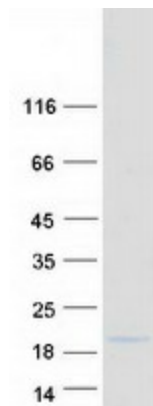
Cytogenetics: 1q21.2
Domains: BolA
Protein Families: Transcription Factors
MW: 14.1 kDa

Gene Summary: Acts as a mitochondrial iron-sulfur (Fe-S) cluster assembly factor that facilitates (Fe-S) cluster insertion into a subset of mitochondrial proteins (By similarity). Probably acts together with the monothiol glutaredoxin GLRX5 (PubMed:27532772). May protect cells against oxidative stress (PubMed:22746225).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC209532



Coomassie blue staining of purified BOLA1 protein (Cat# [TP309532]). The protein was produced from HEK293T cells transfected with BOLA1 cDNA clone (Cat# RC209532) using MegaTran 2.0 (Cat# [TT210002]).