

## Product datasheet for **SC302834**

### **BOLA3 (NM\_001035505) Human Untagged Clone**

#### Product data:

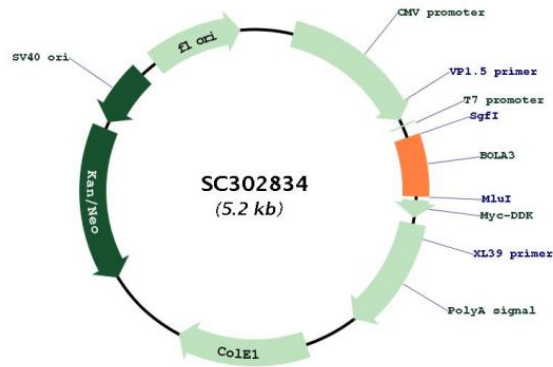
Product Type:	Expression Plasmids
Product Name:	BOLA3 (NM_001035505) Human Untagged Clone
Tag:	Tag Free
Symbol:	BOLA3
Synonyms:	MMDS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC302834 representing NM_001035505. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GTCGTTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTGCATGGAGCCCGCGCGCAGCGCCTCTCTCCGCGGGATCCGCGGGCTTCCACTTCACCAT
CGGATGTTTGCCACTCAGACTGAGGGGGAGCTCAGAGTGACCCAAATTCTCAAAGAAAAGTTCCACGA
GCTACAGCTATAAAAGTCACTGACATTTTCAGGCACTAAAAGAAGAAATCAAAGAGATGCATGGATTGCG
GATATTTACCTCTGTCCCAAACGCTGACCACGCCCTGGCTGCATAGATGCTGCTGCTTAAGACCTTGG
ATGAACTTCACTGACATCATTCTCCCTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



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**Plasmid Map:**


**ACCN:** NM\_001035505

**Insert Size:** 306 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001035505.1](#)

**RefSeq Size:** 465 bp

**RefSeq ORF:** 306 bp

**Locus ID:** 388962

**UniProt ID:** [Q53S33](#)

**Cytogenetics:** 2p13.1

**Protein Families:** Transcription Factors

**MW:** 11.6 kDa

**Gene Summary:** This gene encodes a protein that plays an essential role in the production of iron-sulfur (Fe-S) clusters for the normal maturation of lipoate-containing 2-oxoacid dehydrogenases, and for the assembly of the mitochondrial respiratory chain complexes. Mutation in this gene has been associated with multiple mitochondrial dysfunctions syndrome-2. Two alternatively spliced transcript variants encoding different isoforms with distinct subcellular localization have been reported for this gene (PMID:21944046). [provided by RefSeq, Dec 2011]  
Transcript Variant: This variant (2) lacks an internal coding exon compared to variant 1. This results in a frame-shift and a shorter isoform (2) with a distinct C-terminus compared to isoform 1. This isoform is localized to the cytoplasm (PMID:21944046). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.