

Product datasheet for SC315028

OPA1 (NM_130835) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: OPA1 (NM_130835) Human Untagged Clone
Tag: Tag Free
Symbol: OPA1
Synonyms: BERHS; largeG; MGM1; MTDPS14; NPG; NTG
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_130835 edited
 CCTGCGTGACCTCCCCGCGGGGATGTGGCGACTACGTCGGGCCGCTGTGGCCTGTGA
 GGTCTGCCAGTCTTTAGTGAAACACAGCTCTGGAATAAAAGGAAGTTTACCACTACAAA
 ACTACATCTGGTTTCACGAAGCATTATCATTACATCATCCTACCTTAAAGCTTCAACG
 ACCCCAATTAAGGACATCCTTTCAGCAGTTCTCTTCTCTGACAAAACCTTCTTTACGTAA
 ACTGAAATTTCTCCAATTAATATGGCTACCAGCCTCGCAGGAATTTTGGCCAGCAAG
 ATTAGCTACGAGACTCTTAAACTTCGCTATCTCATACTAGGATCGGCTGTTGGGGGTGG
 CTACACAGCCAAAAGACTTTTGTGATCAGTGAAAGATATGATACCGGACCTTAGTGAATA
 TAAATGGATTGTGCTGACATTGTGGGAAATTGATGAGTATATCGATTTTGGTCACAA
 ATTGTTAGTGAAGTCATAGGAGCTTCTGACCTACTTCTTGTAGTTCTCCGGAAGA
 AACGGCGTTTAGAGCAACAGATCGTGGATCTGAAAGTGACAAGCATTTTAGAAAGGTCT
 GCTTGGTGAAGTCTTCTTACAACAACAATCAAGAGCATGAAGAGGAAGCGCGCAG
 AGCCGCTGGCCAATATAGCACGAGCTATGCCCAACAGAAGCGCAAGGTGTGAGACAAAGA
 GAAAATTGACCAACTTCAGGAAGAACTTCTGCACACTCAGTTGAAGTATCAGAGAATCTT
 GGAACGATTAGAAAAGGAGAACAAGAATTGAGAAAATTAGTATTGCAGAAAAGTACAA
 AGGCATTCATCATAGAAAGCTTAAAGAACTTTGATTGACATGTATTCTGAAGTTCTTGA
 TGTTCTCTGATTATGATGCCAGTTATAATACGCAAGATCATCTGCCACGGGTTGTTGT
 GGTGGAGATCAGAGTGCTGGAAAGACTAGTGTGTTGAAATGATTGCCAAGCTCGAAT
 ATTCCCAAGAGGATCTGGGGAGATGATGACACGTTCTCCAGTTAAGGTGACTCTGAGTGA
 AGGTCCTACCATGTGGCCCTATTTAAAGATAGTTCTCGGGAGTTTGATCTTACCAAAGA
 AGAAGATCTTGCAGCATTAAAGACATGAAATAGAACTTCGAATGAGGAAAAATGTAAAGA
 AGGCTGTACCGTTAGCCCTGAGACCATATCCTTAAATGTAAAAGGCCCTGGACTACAGAG
 GATGGTCTTGTGACTTACCAGGTGTGATTAATACTGTGACATCAGGCATGGCTCCTGA
 CACAAAGGAACTATTTTCAGTATCAGCAAAGCTTACATGCAGAATCCTAATGCCATCAT
 ACTGTGATTCAAGATGGATCTGTGGATGCTGAACGCAGTATTGTTACAGACTTGGTCAG
 TCAAATGGACCCTCATGGAAGGAGAACCATATTCGTTTTGACCAAAGTAGACCTGGCAGA
 GAAAAATGTAGCCAGTCCAAGCAGGATTCAGCAGATAATTGAAGGAAAGCTCTTCCAAT



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GAAAGCTTTAGGTTATTTTGTCTGTTGTAACAGGAAAAGGGAACAGCTCTGAAAGCATTGA
 AGCTATAAGAGAAATATGAAGAAGAGTTTTTTCAGAATTCAAAGCTCCTAAAGACAAGCAT
 GCTAAAGGCACACCAAGTGACTACAAGAAATTTAAGCCTTGCAAGTATCAGACTGCTTTTG
 GAAAATGGTACGAGAGTCTGTTGAACAACAGGCTGATAGTTTCAAAGCAACACGTTTTAA
 CCTTGAAACTGAATGGAAGAATAACTATCCTCGCTGCGGAACTTGACCGGAATGAACT
 ATTTGAAAAAGCTAAAAATGAAATCCTTGATGAAGTTATCAGTCTGAGCCAGGTTACACC
 AAAACATTGGGAGGAAATCCTTCAACAATCTTTGTGGGAAAGAGTATCAACTCATGTGAT
 TGA AACATCTACCTTCCAGCTGCGCAGACCATGAATTCAGGAACTTTTAACACCACAGT
 GGATATCAAGCTTAAACAGTGGACTGATAAACAATTCCTAATAAAGCAGTAGAGTTGTC
 TTGGGAGACCCTACAAGAAGAAATTTCCCGCTTATGACAGAACCAGAAAGGAAAGAGCA
 TGATGACATATTTGATAAACTTAAAGAGGCTGTTAAGGAAGAAAGTATTAACGCACACAA
 GTGGAATGACTTTGCGGAGGACAGCTTGAGGGTATTCAACACAATGCTTTGGAAGACCG
 ATCCATATCTGATAAACAGCAATGGGATGCAGCTATTTATTTTATGGAAGAGGCTCTGCA
 GGCTCGTCTCAAGGATACTGAAAATGCAATTGAAAACATGGTGGTCCAGACTGGAAAAA
 GAGGTGGTTATACTGGAAGAATCGGACCAAGAACAGTGTGTTACAATGAAACCAAGAA
 TG AATTGGAGAAGATGTTGAAATGTAATGAGGAGCACCCAGCTTATCTTGCAAGTATGA
 AATAACCACAGTCCGGAAGAACCCTGAATCCCGAGGAGTAGAAGTAGATCCAAGCTTGAT
 TAAGGATACTTGGCATCAAGTTTATAGAAGACATTTTTTAAAAACAGCTCTAAACCATTG
 TAACCTTTGTGCAAGAGGTTTTTATTACTACCAAAGGCATTTTGTAGATTCTGAGTTGGA
 ATGCAATGATGTGGTCTGTTTTGGCGTATACAGCGCATGCTTGCTATCACCGCAAAATAC
 TTTAAGGCAACAACCTTACAAATACTGAAGTTAGGCGATTAGAGAAAAATGTTAAAGAGGT
 ATTGGAAGATTTTGTCTGAAGATGGTGAGAAGAAGATTAATGCTTACTGGTAAACGCGT
 TCAACTGGCGGAAGACCTCAAGAAAGTTAGAGAAATCAAGAAAAACTTGATGCTTTCAT
 TGAAGCTTTCATCAGGAGAAATAAATTAATTAATGTAATGTAATGTAATGTAATGTAATG
 CTGAAGAACA AAAACATCAACGCTTTTTGTCCAGCCTTTTTTCTCTGCTGTTCCACCT
 TTCTAAACATACAATAAAGTCATGGGATAAAAATAAAAAAAAAAAAAAAAAAAAAACTCGA

- Restriction Sites:** Please inquire
- ACCN:** NM_130835
- Insert Size:** 3200 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:** The ORF of this clone has been fully sequenced and found to match to NM_130835.1. There is a SNP in the ORF.
- 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_130835.1](#), [NP_570848.1](#)

RefSeq Size: 5921 bp

RefSeq ORF: 2940 bp

Locus ID: 4976

Cytogenetics: 3q29

Gene Summary: The protein encoded by this gene is a nuclear-encoded mitochondrial protein with similarity to dynamin-related GTPases. The encoded protein localizes to the inner mitochondrial membrane and helps regulate mitochondrial stability and energy output. This protein also sequesters cytochrome c. Mutations in this gene have been associated with optic atrophy type 1, which is a dominantly inherited optic neuropathy resulting in progressive loss of visual acuity, leading in many cases to legal blindness. [provided by RefSeq, Aug 2017]
Transcript Variant: This variant (6) is missing exon 4, but contains exons 4b and 5b, compared to transcript variant 1. It however, maintains the same reading frame and encodes an isoform (6) of 979 aa. This variant is based on an alternate splice pattern characterized by Delettre et al (2001, PMID: 11810270), but the complete 5' to 3' exon combination is inferred and not supported at the time of review by a single long cDNA. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.