

Product datasheet for **SC315025**

OPA1 (NM_130834) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OPA1 (NM_130834) Human Untagged Clone
Tag:	Tag Free
Symbol:	OPA1
Synonyms:	BERHS; largeG; MGM1; MTDPS14; NPG; NTG
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_130834 edited
ATGTGGCGACTACGTCGGGCCGCTGTGGCCTGTGAGGTCTGCCAGTCTTTAGTGAACAC
AGCTCTGGAATAAAAGGAAGTTTACCACTACAAAACTACATCTGGTTTCACGAAGCATT
TATCATTACATCATCTACCTAACCTAAAGCTTCAACGACCCCAATTAAGGACATCCTTTAG
CAGTTCTCTTCTCTGACAAAACCTTCTTACGTAAGTAACTGAAATTTCTCCAATTAATAT
GGCTACCAGCCTCGCAGGAATTTTTGGCCAGCAAGATTAGCTACGAGACTCTTAAACTT
CGCTATCTCATACTAGGATCGGCTGTTGGGGGTGGCTACACAGCCAAAAAGACTTTTGAT
CAGTGGAAAGATATGATACCGGACCTTAGTGAATATAAATGGATTGTGCCTGACATTGTG
TGGAAATTGATGAGTATATCGATTTTGGAAAATTAGAAAAGCCCTTCTAATTCAGAA
GACCTTGTAAAGTTAGCACCAGACTTTGACAAGATTGTTGAAAGCCTTAGCTTATTGAAG
GACTTTTTTACCTCAGGTCACAAATTGGTTAGTGAAGTCATAGGAGCTTCTGACCTACTT
CTCTTGTAGGTTCTCCGGAAGAAACGGCGTTTAGAGCAACAGATCGTGGATCTGAAAGT
GACAAGCATTTTAGAAAGGTGTCAGACAAAGAGAAAATTGACCACTTCAGGAAGAACTT
CTGCACACTCAGTTGAAGTATCAGAGAATCTTGAACGATTAGAAAAGGAGAACAAGAA
TTGAGAAAATTAGTATTGCAGAAAAGATGACAAAGGCATTATCATAGAAAAGCTTAAGAAA
TCTTTGATTGACATGTATTCTGAAGTTCTTGATGTTCTCTGATTATGATGCCAGTTAT
AATACGCAAGATCATCTGCCACGGGTTGTTGTGTTGGAGATCAGAGTGTGAAAGACT
AGTGTGTTGGAATGATTGCCAAGCTCGAATATTTCCCAAGAGGATCTGGGGAGATGATG
ACACGTTCTCCAGTTAAGGTGACTCTGAGTGAAGTCTCACCATGTGGCCCTATTTAAA
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ATAGAACTTCGAATGAGGAAAAATGTGAAAGAAGGCTGTACCGTTAGCCCTGAGACCATA
TCCTTAAATGTAAGGCGCTGGACTACAGAGGATGGTGTCTTGTGACTTACCAGGTGTG
ATTAATACTGTGACATCAGGCATGGCTCCTGACACAAAGGAAACTATTTTCAGTATCAGC
AAAGCTTACATGCAGAATCCTAATGCCATCATACTGTGATTCAAGATGGATCTGTGGAT
GCTGAACGCAGTATTGTTACAGACTTGGTCAGTCAAATGGACCCTCATGGAAGGAGAACC
ATATTCGTTTTGACCAAAGTAGACTGGCAGAGAAAAATGTAGCCAGTCCAAGCAGGATT
CAGCAGATAAATTGAAGGAAAGCTCTTCCAATGAAAGCTTTAGGTTATTTTGTGTTGTA
ACAGGAAAAGGGAACAGCTCTGAAAGCATTGAAGCTATAAGAGAATATGAAGAAGAGTTT
TTTTCAGAATCAAAGCTCCTAAAGACAAGCATGCTAAAGGCACACCAAGTACTACAAGA
AATTTAAGCCTTGCAGTATCAGACTGCTTTTGGAAAATGGTACGAGAGTCTGTTGAACAA
CAGGCTGATAGTTTCAAAGCAACACGTTTTAACCTTGAACTGAATGGAAGAATAACTAT
CCTCGCCTGCGGGAACCTGACCGGAATGAACTATTTGAAAAGCTAAAAATGAAATCCTT
GATGAAGTTATCAGTCTGAGCCAGGTTACACAAAACATTGGGAGGAAATCCTTCAACAA
TCTTTGTGGGAAAGAGTATCAACTCATGTGATTGAAAACATCTACCTTCCAGCTGCGCAG
ACCATGAATTCAGGAACCTTTAACACCACAGTGGATATCAAGCTTAAACAGTGGACTGAT
AAACAACCTTCTAATAAAGCAGTAGAGGTTGCTTGGGAGACCCTACAAGAAGAAATTTCC
CGCTTTATGACAGAACCAGGAAAGGAAAGAGCATGATGACATATTTGATAAACTTAAAGAG
GGTGTAAAGGAAGAAAGTATTAACGACACAAGTGAATGACTTTGCGGAGGACAGCTTG
AGGCTATTCAACACAATGCTTTGGAAGACCGATCCATATCTGATAAACAGCAATGGGAT
GCAGTATTTATTTATGGAAGAGGCTCTGCAGGCTCGTCTCAAGGATACTGAAAATGCA
ATTGAAAACATGGTGGTCCAGACTGAAAAAAGAGGTGTTATACTGGAAGAATCGGACC
CAAGAACAGTGTGTTCACAATGAAACCAAGAATGAATTGGAGAAGATGTTGAAATGTAAT
GAGGAGCACCCAGCTTATCTTGAAGTATGAAATAACCAAGTCCGGAAGAACCTTGAA
TCCCGAGGAGTAGAAGTAGATCCAAGCTTGATTAAGGATACTTGGCATCAAGTTTATAGA
AGACATTTTTTAAAAACAGCTCTAAACCATTGTAACCTTTGTGGAAGAGGTTTTTATTAC
TACCAAAGGCATTTTGTAGATTCTGAGTTGGAATGCAATGATGTGGTCTTGTGTTGGCGT
ATACAGCGCATGCTTGTATCACCGCAAATACTTTAAGGCAACAACCTTACAAATACTGAA
GTTAGGCGATTAGAGAAAATGTTAAAGAGGATTGGAAGATTTTGTGGAAGATGTTGAG
AAGAAGATTAATTTGCTTACTGGTAAACGCGTTCAACTGGCGGAAGACCTCAAGAAGATT
AGAGAAATTCAAGAAAACCTTGATGCTTTCATTGAAGCTTTCATCAGGAGAAATAA
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Restriction Sites:

Please inquire

ACCN:	NM_130834
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_130834.1. 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:	<ol style="list-style-type: none">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_130834.1</u> , <u>NP_570847.1</u>
RefSeq Size:	5918 bp
RefSeq ORF:	2937 bp
Locus ID:	4976
UniProt ID:	<u>O60313</u>
Cytogenetics:	3q29
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (5) contains an additional exon 4b, compared to transcript variant 1. It however, maintains the same reading frame and encodes an isoform (5) of 978 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.</p>