

Product datasheet for **SC128155**

OPA1 (NM_015560) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OPA1 (NM_015560) 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: >NCBI ORF sequence for NM_015560, the custom clone sequence may differ by one or more nucleotides

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ATGTGGCGACTACGTCCGGCCGCTGTGGCCTGTGAGGTCTGCCAGTCTTTAGTGAACACAGCTCTGGAA
TAAAGGAAGTTTACCACTACAAAACTACATCTGGTTTCACGAAGCATTATCATTACATCATCTAC
CTTAAAGCTTCAACGACCCCAATTAAGGACATCCTTTCAGCAGTCTCTCTCTGACAAACCTTCTTTA
CGTAAACTGAAATTTCTCTCCAATTAATATGGCTACCAGCCTCGCAGGAATTTTGGCCAGCAAGATTAG
CTACGAGACTCTTAAACTTCGCTATCTCATACTAGGATCGGCTGTTGGGGTGGCTACACAGCCAAAA
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TGGGAAATTTGATGAGTATATCGATTTTGGAGAAATAGAAAAGCCCTTCTAGTTCAGAAGACCTTGTA
AGTTAGCACCAGACTTTGACAAGATTGTTGAAAGCCTTAGCTTATTGAAGGACTTTTTACCTCAGGTTT
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TAGAAAGCTTAAAGAAATCTTTGATTGACATGTATTCTGAAGTTCTTGATGTTCTCTCTGATTATGATGCC
AGTTATAATACGCAAGATCATCTGCCACGGTGTGTGGTTGGAGATCAGAGTGTGAAAGACTAGTG
TGTGGAAATGATTGCCAAGCTCGAATATCCCAAGAGGATCTGGGGAGATGATGACACGTTCTCCAGT
TAAGGTGACTCTGAGTGAAGTCTCACCATGTGGCCCTATTTAAAGATAGTTCTCGGGAGTTTGTCTT
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TGACTTACCAGGTGTGATTAATACTGTGACATCAGGCATGGCTCCTGACACAAAGGAAACTATTTTCAGT
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GCCTGCGGAACTTGACCGGAATGAACTATTTGAAAAAGCTAAAAATGAAATCCTTGATGAAGTTATCAG
TCTGAGCCAGGTTACACCAAAACATTGGGAGGAAATCCTTCAACAATCTTTGTTGGGAAAGAGTATCAACT
CATGTGATTGAAAACATCTACCTTCCAGCTGCGCAGACCATGAATTCAGGAACCTTTTAAACCACAGTGG
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ACAAGAAGAAATTTCCCGCTTTATGACAGAACCAGGAAAGGAAAGAGCATGATGACATATTTGATAAACTT
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TATAGAAGACATTTTTTAAAAACAGCTCTAAACCATTGTAACCTTTGTCGAAGAGTTTTTATTACTACC
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AAAGAGGTATTGGAAGATTTTGTGAAGATGGTGAGAAGAAGATTAATTTGCTTACTGGTAAACGCGTTC
AACTGGCGGAAGACCTCAAGAAAGTTAGAGAAATTCAGAAAAACTTGATGCTTTCATTGAAGCTCTTCA
TCAGGAGAAATAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_015560 unedited GGCCGGCGATTCCGGACGAGGATGCGCCATTGGGAGGGCCTCGGCCGCGGCTCTGTGCC TTGCTGCTGAGGGCCACTTCTGGGTCATTCTGGACCGGGAGCCGGGCTGGGGCTACA CGGGGGCTCCCGCGTGGCCGTCTCGGCGCTGCGTGACCTCCCGCCGGCGGGATGTGGC GACTACGTCGGGCGCTGTGGCCTGTGAGGTCTGCCAGTCTTTAGTGAACACAGCTCTG GAATAAAGGAAGTTTACCACTACAAAACTACATCTGGTTTCACGAAGCATTATCATT CACATCATCCTACCTTAAAGCTTCAACGACCCCAATTAAGGACATCCTTTCAGCAGTTCT CTTCTCTGACAAACCTTCCCTTACGTAAACTGAAATTCTCTCAATTAATATGGCTACC AGCCTCGCAGGAATTTTTGGCCAGCAAGATTAGCTACGAGACTCTAAAACTTCGTATC TCATACTAGGATCGGCTGTTGGGGTGGCTACACAGCCAAAAAGACTTTTGATCAGTGGA AAGATATGATACCGACCTTAGTGAATATAAATGGATTGTGCCTGACATTGTGTGGGAAA TTGATGAGTATATCGATTTTGGAAAAATAGAAAAAGCCCTTCTAGTTCAGAAGACCTTG NTAAGTTAGCACCAGACTTTGACAAGATTGTTGAAAGCCTTAGCTTATTGAAGGACTTTT TTACCTCAGGTTCTNCGGAAGAAACGGGNCGTTAGAGCACAGATCGTGGGATCTGAAGTG ACAAGCATTTTAGNAAGGTGTCAGACAAGAGAAAATGACCACTTTCAGAGAACTTGCCA CTCAGNTGAGTTCAGAGATCTTGACGTTAGAAAAGAGACAAGC</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_015560 unedited NTTTCACACTCAGTACCGCGTCCGCATCCTAGGATCGAGTTTTTTTTTTTTTTTTTTT CAGGCTACTGTGATTTTATACAATTGATAACTTTAAACAATTGCTATATAAGTTTTAT TTCAAAACACCTAGCATTGTATTTCTGGAAAAGAACTGAACATTGAGCAACCTCAGTTA ATCCATTAACGAGTGCCACCACAAATAAGACAACAAACAGAGAACAAGCTTCTTATCTT CAAGGACTGAACCTAATGGCCATACCAATTATATTATCCGATTTGTCACCTTAGTACAA CAAAATAGGATGTTAATCCATTACCACTGTTCTTCCATTCCGAGAGGCAGCTGATGGTTAA AGCGCCCGTAACATACATCGATTATTTTATCCCATGACTTTATTGTATGTTTAGAAAGG TGGAACAGCAGAAGAAAAAGAGGCTGGACAAAAGACGTTGATGTTTTGTTCTTCAGATG TATGCAGAGCTGATTATGAGTACGATTTTAATTTATTTCTCTGATGAAGAGCTTCAATG AAAGCATCAAGTTTTTCTGAATTTCTCTAACTTTCTTGAGGTCTCCGCCAGTTGAACG CGTTTACCAGTAAGCAATTTAATCTTCTTCTAACCATCTTCAAGCAAATCTTCCATACCT CCTTAACATTTTTTCCCTAATCGCCTAACTTCACTATTTGAAAGTTGTTGCCTTAAGTAT TTGCGGTGATAGCAAGCCTGCGCTGTATACGCCAAACAGGACCCTCATTGGCTTCCA ACTGAAAATTTAAGTAACTCAAACTACAAAAAGCCCTTTGGAAGTAATAAAAACCCCT TCCAAAAAGGTACATGGGTTTTAAAGCTGTTTTTAAAAAGACCTTCATATAACTGGAGC CCATGATTCTTTAAAGCTT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_015560
Insert Size:	4000 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).
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_015560.1](#), [NP_056375.1](#)

RefSeq Size: 5864 bp

RefSeq ORF: 2883 bp

Locus ID: 4976

UniProt ID: [O60313](#)

Cytogenetics: 3q29

Domains: dynamin

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 (1) is the original transcript identified. It contains 29 exons and encodes an isoform (1) of 960 aa. 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.