

Product datasheet for **SC112844**

Optineurin (OPTN) (NM_021980) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Optineurin (OPTN) (NM_021980) Human Untagged Clone
Tag:	Tag Free
Symbol:	Optineurin
Synonyms:	ALS12; FIP2; GLC1E; HIP7; HYPL; NRP; TFIIIA-INTP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_021980 edited
GAATTCGGCACGAGGCTCCGCCACCGCCGCCGCCGCCGGCAGGTTCCCTGGTCAGCGTC
CCATCCCAGGTCGGGAGTTCTCTCCAGGCGGCACGATGCCGAGGAAACAGTGACCCGTGAGC
GAAGCCAAGCCGGGGCGGCAGGTGTGGCTTTGATAGCTGGTGGTGCCACTTCTGGCCTTG
GATGAGCCGTACGCTCTGTAACCCAACCTTCTCACCTTTGAAACAGCTGCCTGGTTCA
GCATTAATGAAGATTAGTCAGTGACAGGCTGGTGTGCTGAGTCCGCACATAGAATTCT
GCAATGTCCCATCAACCTCTCAGCTGCCCTCACTGAAAAGGAGGACAGCCCCAGTGAAAGC
ACAGGAAATGGACCCCCACCTGGCCACCCAACCTGGACACGTTTACCCCGGAGGAG
CTGCTGCAGCAGATGAAAGAGCTCTGACCGAGAACCACAGCTGAAAGAAGCCATGAAG
CTAAATAATCAAGCCATGAAAGGGAGATTTGAGGAGCTTTCGGCCTGGACAGAGAAAACAG
AAGGAAGAACGCCAGTTTTTTTTGAGATACAGAGCAAAGAAGCAAAGAGCGTCTAATGGC
CTTGAGTCATGAGAATGAGAAATGAAGGAAGAGCTTGAAAACAAAAGGGAAATCAGA
AAGGTCATCTGAGGACCCACTGATGACTCCAGGCTTCCAGGGCCGAAGCGGAGCAGGA
AAAGGACCAGCTCAGGACCCAGGTGGTGAAGCTACAAGCAGAGAAGGCAGACCTGTTGGG
CATCGTGTCTGAACTGCAGCTCAAGCTGAACTCCAGCGGCTCCTCAGAAGATTCCTTTGT
TGAAATAGGATGGCTGAAGGAGAAGCAGAAGGGTCAGTAAAAGAAATCAAGCATAGTCC
TGGGCCACGAGAACAGTCTCCACTGGCACGGCATTGTCTAAATATAGGAGCAGATCTGC
AGATGGGGCCAAGAATTACTTCCAACATGAGGAGTTAACTGTGAGCCAGCTCCTGCTGTG
CCTAAGGGAAGGGAAATCAGAAGGTGGAGAGACTTGAAGTTGCACTCAAGGAGGCCAAAGA
AAGAGTTTCAGATTTTGAAGAAAACAAGTAATCGTTCTGAGATTGAAACCCAGACAGA
GGGGAGCACAGAGAAAGAGAATGATGAAGAGAAAGGCCCGGAGACTGTTGGAAGCGAAGT
GGAAGCACTGAACCTCCAGGTGACATCTCTGTTTAAGGAGCTTCAAGAGGCTCATACAAA
ACTCAGCGAAGCTGAGCTAATGAAGAAGAGACTTCAAGAAAAGTGCAGGCCCTTGAAAG
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AAAGTTAGAGCTACAAGTGGAAAGCATGCTATCAGAAATCAAAATGGAACAGGCTAAAAC
AGAGGATGAAAAGTCAAATTAAGTGTGCTACAGATGACACACAACAAGCTTCTTCAAGA
ACATAAATATGCAATTGAAAAAATTGAGGAACTAACAGAAAAGAGTCAGAAAAAGTGA
CAGGGCAGTGCTGAAGGAACTGAGTAAAAACTGGAAGTGGCAGAGAAGGCTCTGGCTTC
CAAACAGCTGCAAATGGATGAAATGAAGCAAACCATGCCAAGCAGGAAGAGGACCTGGA
AACCATGACCATCCTCAGGGCTCAGATGGAAGTTTACTGTTCTGATTTTCATGCTGAAAG
AGCAGCGAGAGAGAAAATTCATGAGGAAAAGGAGCAACTGGCATTGCAGCTGGCAGTTCT
GCTGAAAGAGAATGATGCTTTCGAAGACGGAGGCAGGCAGTCCTTGATGGAGATGCAGAG
TCGTCATGGGGCGAGAACAAGTACTCTGACCAGCAGGCTTACCTTGTTCAAAGAGGAGC
TGAGGACAGGGACTGGCGGCAACAGCGGAATATCCGATTCACTTCCGCCCAAGTGTGG
AGAGGTTCTGCCTGACATAGACAGTTCACAGATTCACGTGATGGATTGCATCATTTAAGT
GTTGATGTATCACCTCCCCAAAACCTGTTGGTAAATGTCAGATTTTTCTCCAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTCGAC
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021980 unedited
 TTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTCCGCCACCGCCG
 CCGCCCGCCGGCAGGTTCCCTGGTCAGCGTCCCATCCCGGTCGGGAGTTCTCTCCAGGCG
 GCACGATGCCGAGGAAACAGTGACCCTGAGCGAAGCCAAGCCGGGCGGCAGGTGTGGCTT
 TGATAGCTGGTGGTGCCACTTCTGGCCTTGGATGAGCCGTACGCCTCTGTAAACCCAAC
 TTCCTCACCTTTGAAACAGCTGCCTGGTTCAGCATTAAATGAAGATTAGTCAGTGACAGGC
 CTGGTGTGCTGAGTCCGCACATAGAACTTCTGCAATGTCCCATCAACCTCTCAGCTGCCT
 CACTGAAAAGGAGGACAGCCCCAGTAAAAGCACAGGAAATGGACCCCCACCTGGCCCA
 CCCAAACCTGGACACGTTTACCCCGGAGGAGCTGCTGCAGCAGATGAAAGAGCTCCTGAC
 CGAGAACCACCAGCTGAAAGAAGCCATGAAGCTAAATAATCAAGCCATGAAAGGGAGATT
 TGAGGAGCTTTCGGCCTGGACAGAGAAACAGAAGGAAGAACGCCAGTTTTTTTGGATAC
 AGAGCAAAGAAGCAAAGAGCGTCTAATGGCCTTGAGTCATGAGAATGAGAAATTGAAGG
 AAGAGCTTGGAAAACAAAAGGGAAATCAGAAAGGTCATCTGAGGACCCCACTGATGACT
 CCAGNCTTNCAGGGCCGAAGCGGAGCAGGANAAGGACCCAGCTCAGACCCANNGTGGTG
 AGGGCTACAGCAGAGAAGGCAGACCTGTTGGGCATCGTGTCTGAACTGCAGCTCAAGCTG
 AACTTCANCGGGCTCTCAGAAGATTCTTTGNTGAATTANGATGGCTGAAAGAGAACAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_021980 unedited
 TTTGGACGCGGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTGGGAGGAAAAAACTGACATTTACCAACAGTTTTGGGGAGGGGATACCTC
 AACACTTAAATGATGCCATCCATCACGTGAATCTGTAACGGGTCTATGTCAGGCAAAACC
 TCTCCACACTTGGGGCAGGAATGAATCGGAATATTCGGCTGTTGCCGCCAGTCCCTGGCC
 TCAACTCCTTTTTGAACAAGGAAACCTGCTGGGCAAAATCACTTGTCTCGCCCATGA
 CGACTTTGCATTTCCATCAAGGACTGGTGCCTCCGTCTTTGAAAGCATATTTTTTTTTT
 AACAAAACGCAACTGCAATGCCAATTGCTCCTTTTCCTCATGAAATTTCTCTCTCGCT
 GCTCTTTCAGCATGAAAAACAAACAGTAAACTCCATTTGAAACCTGAGGAAGGGCATG
 GGTTCCAAAGGCCTCTTCTGCTTGGCAAAGGGTTGCTTCATTTCCATTTGCAGCTGT
 TTGAAACCAAACCTTTTCTGGCAGTTCAGTTTTTCACTCAGTTCCTTAACTGGC
 CTGGCCACTTTTTCTGACTCTTTTCTGGTAATTCCTCAATTTGTTTCAAAGCATTATTA
 GTTCTTGAAGAACTTGGTGTGTGTCATCTGTAACAGTTAATTTGGACTTTTTCATC
 CTGGTTTTACCCCGTTCCATTTTGAATTCTGATAGCAAGCTTTCCACATTGGAGCTCTAAC
 TTTTTGTTAATATAAAACAAGCTTTGCTTTTCACTCTGAAGGAATTGGGAAAT
 TTTCCCTTCAAGGGGCCGACACCTTNTCTGGAGGCTCTTCTCATTAACTCAACTTCCC
 TGAGATTTGATGAGCCTTTGGACCTCCTTAACAAGATGCACCTGAAGGTAAGGCTTTCA
 CTTCTTCACAATTTCCGG

Restriction Sites:

NotI-NotI

ACCN:

NM_021980

Insert Size:

2140 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:	<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:	NM_021980.4 , NP_068815.2
RefSeq Size:	3376 bp
RefSeq ORF:	1734 bp
Locus ID:	10133
UniProt ID:	Q96CV9
Cytogenetics:	10p13
Domains:	zf-C2H2
Protein Families:	Druggable Genome
Gene Summary:	<p>This gene encodes the coiled-coil containing protein optineurin. Optineurin may play a role in normal-tension glaucoma and adult-onset primary open angle glaucoma. Optineurin interacts with adenovirus E3-14.7K protein and may utilize tumor necrosis factor-alpha or Fas-ligand pathways to mediate apoptosis, inflammation or vasoconstriction. Optineurin may also function in cellular morphogenesis and membrane trafficking, vesicle trafficking, and transcription activation through its interactions with the RAB8, huntingtin, and transcription factor IIIA proteins. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, 3, and 4 encode the same protein.</p>