

Product datasheet for **RG221792**

Optineurin (OPTN) (NM_021980) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Optineurin (OPTN) (NM_021980) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OPTN
Synonyms:	ALS12; FIP2; GLC1E; HIP7; HYPL; NRP; TFIIIA-INTP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221792 representing NM_021980
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCTTGAGTCATGAGAATGAGAAATGAAGGAAGAGCTTGGAAAACAAAAGGGAAATCAGAAAGGT
 CATCTGAGGACCCACTGATGACTCCAGGCTTCCAGGGCCGAAGCGGAGCAGGAAAAGGACCAGCTCAG
 GACCCAGGTGGTGAAGCTACAAGCAGAGAAGGCAGACCTGTTGGGCATCGTGTCTGAACTGCAGCTCAAG
 CTGAACTCCAGCGGCTCCTCAGAAGATTCCTTTGTTGAAATTAGGATGGCTGAAGGAGAAGCAGAAGGGT
 CAGTAAAAGAAATCAAGCATAGTCTGGGCCACGAGAACAGTCTCCACTGGCACGGCATTGTCTAAATA
 TAGGAGCAGATCTGCAGATGGGGCCAAGAATTACTTCGAACATGAGGAGTAACTGTGAGCCAGCTCCTG
 CTGTGCCAAGGGAAAGGGAATCAGAAGGTGGAGAGACTGAAGTTGCACTCAAGGAGGCCAAGAAAGAG
 TTTGAGATTTTAAAAGAAAACAAGTAATCGTTCTGAGATTGAAACCCAGACAGAGGGGAGCACAGAGAA
 AGAGAATGATGAAGAGAAAGGCCCGGAGACTGTTGGAAGCGAAGTGAAGCACTGAACCTCCAGGTGACA
 TCTCTGTTAAGGAGCTCAAGAGGCTCATACAAAACAGCGAAGCTGAGCTAATGAAGAAGAGACTTC
 AAGAAAAGTGCAGGCCCTTGAAGGAAAAATTCTGCAATTCATCAGAGTTGAATGAAAAGCAAGAGCT
 TGTTTATACTAACAAAAGTTAGAGCTACAAGTGGAAAGCATGCTATCAGAAATCAAAATGGAACAGGCT
 AAAACAGAGGATGAAAAGTCCAAATTAAGTGTGCTACAGATGACACACAACAGCTTCTTCAAGAACATA
 ATAATGCATTGAAAACAATTGAGGAACTACAAGAAAAGAGTCAGAAAAGTGGACAGGGCAGTGCCTGAA
 GGAAGTGAAGTAAAAGTGAAGTGGCAGAGAAGGCTCTGGCTTCCAAACAGCTGCAATGGATGAAATG
 AAGCAAACCATGCCAAGCAGGAAGAGGACCTGGAACCATGACCATCCTCAGGGCTCAGATGGAAGTTT
 ACTGTTCTGATTTTCATGCTGAAAAGAGCAGCAGAGAGAAAATTCATGAGGAAAAGGACCAACTGGCATT
 GCAGCTGGCAGTTCTGCTGAAAAGAGAATGATGCTTTCGAAGACGGAGGCAGGCAGTCTTGTGAGGATG
 CAGAGTCGTCATGGGGCAGAACAGTACTCTGACCAGCAGGCTTACCTTGTCAAAGAGGAGCTGAGG
 ACAGGGACTGGCGGCAACAGCGGAATATCCGATTATTCTGCCCAAGTGTGGAGAGTTCTGCCTGA
 CATAGACAGTTACAGATTCACGTGATGGATTGCATCATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221792 representing NM_021980
 Red=Cloning site Green=Tags(s)

MALSHENEKLEELGKLGKRSERSEDPTDDSRLPRAEAEQEKDQLRTQVVRLQAEKADLLGIVSELQK
 LNSSGSEDSFVEIRMAEGEAEGSVKEIKHSPGPTRTVSTGTALSKYRSRSADGAKNYFEHEELTVSOLL
 LCLREGNQKVERLEVALKEAKERVSDFEKKTNRSEIETQTEGSTEKENDEEKGPETVGSEVEALNLQVT
 SLFKELQEAHTKLSEAEMLMCKRLQEKQALERKNSAIPSELNEKQELVYTNKKLELQVESMLSEIKMEQA
 KTEDEKSKLTVLQMTNKLKQEHNNALKTIEELTRKESEKVDRAVLKELSEKLELAEKALASKQLQMDM
 KQTIKQEEDELETMTILRAQMEVYCSDFHAERAAREKIHEEKEQLALQLAVLLKENDAFEDGGRQSLMEM
 QSRHGARTSDSDQAYLVQRGAEDRDWRQQRNIPHSKPKCEVLPDIDTLQIHVMDCII

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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_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: 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]