

Product datasheet for **RC205829**

NPL4 (NPLOC4) (NM_017921) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NPL4 (NPLOC4) (NM_017921) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NPL4
Synonyms:	NPL4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205829 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCGAGAGCATCATAATTCGTGTCCAGTCCCCGGATGGAGTGAAGCGGATCACAGCAACAAAGAGAG
 AACACAGCAGCAACATTTTGA AAAAGGTTGCAAAGGAGTTGGCTTCCAAAATAATGGCTTCTCGGTTTA
 CATCAATAGAAACAAGACCGGAGAGATAACAGCCTCCTCCAACAATCCCTCAACTTGCTAAAAATCAAG
 CATGGCGATTTGTTGTTCTGTTCCCTCGAGCCTTGCTGGGCCCTCATCTGAAATGGAGACTTCAGTTC
 CACCGGGCTTCAAAGTCTTTGGCGCTCCCAACGTGGTGGAGGATGAGATTGATCAGTACCTCAGCAAACA
 GGACGGGAAGATTTACAGAAGCCGAGACCCACAGCTATGCCGCCACGGCCCTTTGGGAAATGCGTGCAC
 TGCGTCCCTCTAGAGCCATTGATGAGGACTATCTAAACCATCTCGAGCCTCCCGTAAGCACATGTCT
 TCCACGCCTACATCCGGAAGCTGACTGGAGGGGCTGACAAGGGGAAGTTTGTGCCCTGGAGAACATCAG
 CTGCAAGATTAAGTCAGGGTGCAGGGGCACCTCCCGTGGCCGAATGGCATCTGTACTAAGTCCAGCCG
 AGCGCCATCACGCTGAACAGACAGAAGTACAGGCATGTGGACAATATCATGTTTGAAGTACACCGTCCG
 CTGACCGCTTTCTTGACTTCTGGAGAAAGACAGGGAACAGCATTGTTGGTACTTATACGGACGGTACAC
 GGAGCACAAAGACATTCCCCTTGGCATCAGGGCTGAAGTGGTGCATTTATGAGCCACCTCAGATTGGT
 ACACAGAACAGCTTGGAGCTTCTTGGAGATCCAAAAGCTGAAGTGGTTCGATGAAATGCTGCCAACTTG
 GCCTGCGGAAGGTTGGCTGGATATTTACAGACCTCGTCTCAGAAGATACCCGAAAGGGTACCGTCCGCTA
 CAGTCGAAATAAGGACACCTATTTCTAAGTTCAGAAGAGTGCATCACTGCAGGAGACTTCCAGAACAAG
 CATCCAAACATGTGCCGGCTCTCTCCAGACGGACATTTGGATCCAAGTTTGTACTGCAGTGGCTACAG
 GTGGTCCCTGACAACCAAGTCCACTTTGAAGGGTACCAGGTGCCAATCAGTGTATGGCAGTGGTCCGTGA
 TGAGTGTGTTGCTGCCATGCAAGGACGCCCGGAGCTTGGCTACGCCAAGGAGTCTAGCAGTGAAGCAGTAC
 GTGCCCTGATGTGTTTTATAAGGACGTAGACAAGTTTGGCAACGAGATCACCCAGCTGGCCCGTCCCCTGC
 CTGTGGAGTATCTCATCATAGACATCACAAACTTTCCCAAGGATCCAGTTTACACTTTTTCTATTTT
 GCAAAATCCATTTCTATTGAAAACCGGGATGTATTGGGTGAGACACAGGACTTCCATAGCTTGGCCACC
 TATTTGTCTCAGAATACCTCATCTGTGTTCTTGGATACCATCTCAGATTTCCACCTTGTCTGTTCTGG
 TCACCAATGAAGTTATGCCTCTGCAGGACAGCATCAGCTTGTCTGGAGCCGTGCGGACCAGAAATGA
 GGAGCTCGCCAGACATGGAAGAGGTCTGAGCAGTGGGCCACCATCGAGCAGCTGTGCAGCACAGTTGGC
 GGGCAGCTCCCAGGTCTCATGAGTACGGGGCCGTGGGGGCTCCACACACAGGCCACTGCAGCCATGT
 GGGCCTGTGAGCAGTGCAGTTCATGAACAGCCAGGCACAGGCCACTGCGAGATGTGCAGCCTCCCAG
 GACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205829 protein sequence
 Red=Cloning site Green=Tags(s)

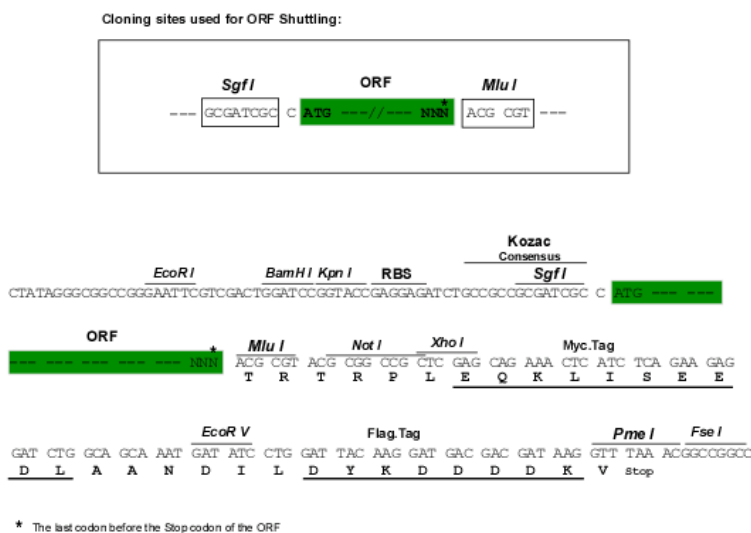
MAESIIIRVQSPDGVKRIATKRETAATFLKVKAKEFGFQNNGFSVYINRNKTGEITASSNLSLNLKIK
 HGDLLFLFPSSLAGPSSSEMETSVPFGFKVFGAPNVVEIDQYLSKQDGIYRSRDPQLCRHGPLGKCVH
 CVPLEPFDELDYLNHLEPPVKHMSFHAYIRKLTGGADKGFVALENISCKIKSGCEGHLPPWPNGICTKCP
 SAITLNRQKYRHVDNIMFENHTVADRFLDFWRKTGNQHFGLYGRYTEHKDIPLGIRAEVAAIYEPPIQIG
 TQNSLELLEDPKAEVVDEIAAKLGLRKVGWIFDLVSEDTRKGTVRYSRNKDITYFLSSEECITAGDFQNK
 HPNMCRLSPDGHFGSKFVTAVATGGPDNQVHFEQVSNQCMALVRDECLLPCKDAPELGYAKESSEQY
 VPDVIFYKDVKFNEITQLARPLPVEYLIIDITTTFPKDPVYTFISQNPFPENRDVLETQDFHSLAT
 YLSQNTSSVFLDTISDFHLLFLVTNEVMPLQDSISLLEAVRTRNEELAQTWKRSEQWATIEQLCSTVQ
 GQLPGLHEYGAVGGSTHTATAAMWACQHCTFMNQPGTGHCEMCSLPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6066_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017921

ORF Size: 1824 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_017921.4](#)

RefSeq Size: 4401 bp

RefSeq ORF: 1827 bp

Locus ID: 55666

UniProt ID: [Q8TAT6](#)

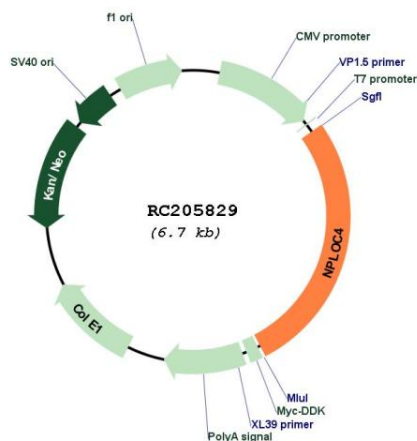
Cytogenetics: 17q25.3

Domains: zf-RanBP, zf-NPL4, NPL4

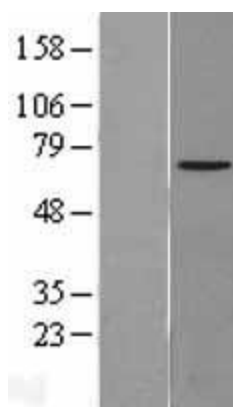
MW: 68.1 kDa

Gene Summary: The ternary complex containing UFD1, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome. The NPLOC4-UFD1-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope (By similarity). Acts as a negative regulator of type I interferon production via the complex formed with VCP and UFD1, which binds to DDX58/RIG-I and recruits RNF125 to promote ubiquitination and degradation of DDX58/RIG-I (PubMed:26471729).[UniProtKB/Swiss-Prot Function]

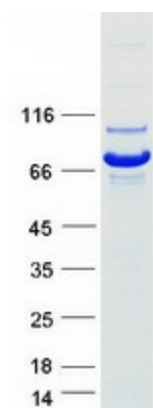
Product images:



Circular map for RC205829



Western blot validation of overexpression lysate (Cat# [LY402630]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205829 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NPLOC4 protein (Cat# [TP305829]). The protein was produced from HEK293T cells transfected with NPLOC4 cDNA clone (Cat# RC205829) using MegaTran 2.0 (Cat# [TT210002]).