

Product datasheet for RC214665

PYDC2 (NM_001083308) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PYDC2 (NM_001083308) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PYDC2
Synonyms: cPOP2; POP2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214665 representing NM_001083308
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCATCTTCTGCAGAGCTGGACTTCAACCTGCAGGCTCTTCTGGAGCAGCTCAGCCAGGATGAGTTGA
GCAAGTTCAGTCTCTGATCAGAACAATCTCCCTGGGAAAGGAGCTACAGACCGTCCCCAGACAGAGGT
AGACAAGGCTAATGGGAAGCAACTGGTAGAAATCTTACCAGCCACTCTGCAGCTACTGGCAGGGATG
GCAGCCATCCAGGTCTTTGAAAAGATGAATCAAACGCATCTGTCTGGGAGAGCTGATGAACACTGTGTGA
TGCCCCACCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214665 representing NM_001083308
Red=Cloning site Green=Tags(s)
MASSAELDFNLQALLEQLSQDELKFKSLIRTISLGKELQTPVQTEVDKANGKQLVEIFTSHSCSYWAGM
AAIQVFEMNQTHLSGRADEHCVMPPP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8030_e02.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:



ACCN: NM_001083308

ORF Size: 291 bp

OTI Disclaimer: 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_001083308.1](#), [NP_001076777.1](#)

RefSeq Size: 294 bp

RefSeq ORF: 294 bp

Locus ID: 152138

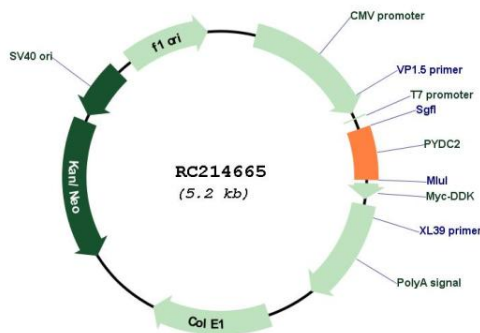
UniProt ID: [Q56P42](#)

Cytogenetics: 3q28

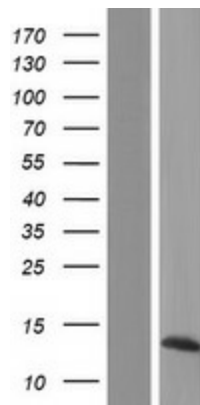
MW: 10.6 kDa

Gene Summary: May play a role in innate immunity by disrupting the interaction between PYCARD and NLRP3, thereby regulating the NLRP3 inflammasome (PubMed:17339483, PubMed:17178784). May also inhibit NF-kappa-B signaling distally by affecting the nuclear accumulation of RELA (PubMed:17339483, PubMed:24871464).[UniProtKB/Swiss-Prot Function]

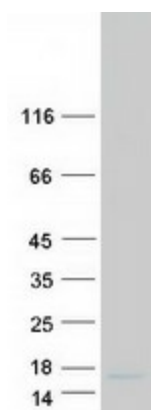
Product images:



Circular map for RC214665



Western blot validation of overexpression lysate (Cat# [LY421211]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214665 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PYDC2 protein (Cat# [TP314665]). The protein was produced from HEK293T cells transfected with PYDC2 cDNA clone (Cat# RC214665) using MegaTran 2.0 (Cat# [TT210002]).