

## Product datasheet for **RC210492**

### **COP1 (RFWD2) (NM\_022457) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	COP1 (RFWD2) (NM_022457) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COP1
Synonyms:	CFAP78; FAP78; RFWD2; RNF200
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC210492 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCTGGTAGCCGCCAGGCCGGTTCGGGCTCCGCTGGGACAAGCCCCGGTCTCGGCGGCTCCTCGG  
 TGACTTCGCTCCTCGTCTTTATCCTCTTCCCGTCCGCGCTTCCGTGGCGGTTTCGGCGGCAGCGCT  
 GGTGTCCGGCGGGTGGCCAGGCCGGCTCGGGCGGCTCGGGGCCCCGGTGCAGCCTGTGTTGGTG  
 GCGCCCGCGTATCGGGTAGCGCGCGGGGGCGGTGTCCACGGGCTGTCCCGGCACAGCTGCGCGGCCA  
 GGCCAGCGCGGCGTAGGAGGCAGCAGCTCCAGCCTAGGCAGCGGCAGCAGGAAGCGACCTCTCCTCGC  
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 TTTTAAGTTTGATACAGTCAAAGTGTCTCGACAAAGACCGAAAAGAAGATGATACAAATGAATTTGTT  
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 CAATTAAGGTGCTAGAATTGGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210492 protein sequence  
Red=Cloning site Green=Tags(s)

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MSGSRQAGSGSAGTSPGSSAASSVTSASSSLSSSPSPSVAVSAAALVSGGVAQAAGSGGLGGPVRPVLV
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DMIEEAYMTKCGHSFCYKCIHQSLLEDNNRCPKCNVVDNIDHLYPNFLVNELILKQKQRFEEKRFKLDHS
VSSTNGHRWQIFQDWLGTDDQNDLANVNLMLLELLVQKKKQLEAESHAALQILMEFLKVARRNKREQLE
QIQKELSVLEEDIKRVEEMSGLYSPVSEDSTVPQFEAPSPSHSSIIDSTEYSQPPGFSGSSQTKKQPWYN
STLASRRKRLTAHFEDLEQCYFSTRMSRISDDSRASQLDEFQECLSKFTRYNSVRPLATLSYASDLVNG
SSIVSSIEFDRDCDYFAIAGVTKKIKVVEYDVIQDAVDIHYPENEMTCNSKISCISWSSYHKNLLASSD
YEGTVILWDGFTGQRSKVYQEHEKRCWSVDFNLMDPKLLASGDDAKVKLWSTNLDNSVASIEAKANVCC
VKFSPSSRYHLAFGCADHCVHYDRLRNTKQPI MVFKGHRKAVSYAKFVSGEEIVSASTDSQLKLWNVGP
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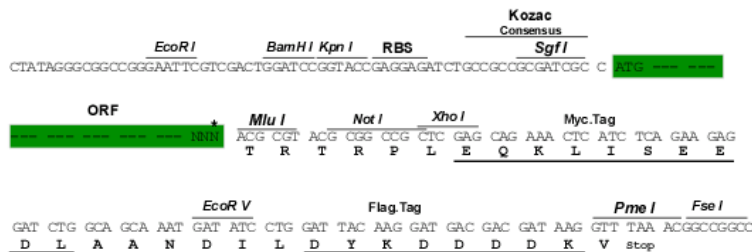
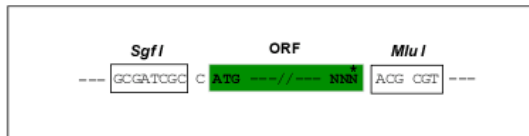
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6835\\_c05.zip](https://cdn.origene.com/chromatograms/mk6835_c05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_022457

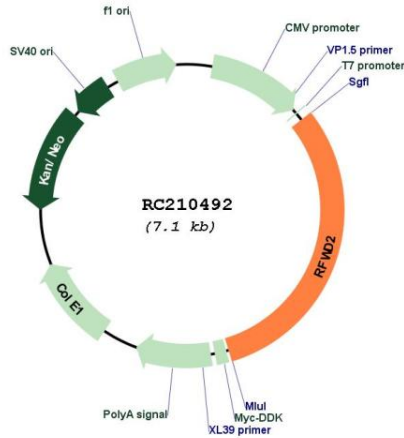
**ORF Size:** 2193 bp

**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](#)

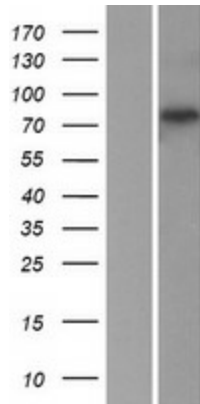
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_022457.7</a>
<b>RefSeq Size:</b>	2806 bp
<b>RefSeq ORF:</b>	2196 bp
<b>Locus ID:</b>	64326
<b>UniProt ID:</b>	<a href="#">Q8NHY2</a>
<b>Cytogenetics:</b>	1q25.1-q25.2
<b>Domains:</b>	WD40, RING
<b>Protein Pathways:</b>	p53 signaling pathway, Ubiquitin mediated proteolysis
<b>MW:</b>	80.5 kDa
<b>Gene Summary:</b>	E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Involved in JUN ubiquitination and degradation. Directly involved in p53 (TP53) ubiquitination and degradation, thereby abolishing p53-dependent transcription and apoptosis. Ubiquitinates p53 independently of MDM2 or RCHY1. Probably mediates E3 ubiquitin ligase activity by functioning as the essential RING domain subunit of larger E3 complexes. In contrast, it does not constitute the catalytic RING subunit in the DCX DET1-COP1 complex that negatively regulates JUN, the ubiquitin ligase activity being mediated by RBX1. Involved in 14-3-3 protein sigma/SFN ubiquitination and proteasomal degradation, leading to AKT activation and promotion of cell survival. Ubiquitinates MTA1 leading to its proteasomal degradation. Upon binding to TRIB1, ubiquitinates CEBPA, which lacks a canonical COP1-binding motif (Probable).[UniProtKB/Swiss-Prot Function]

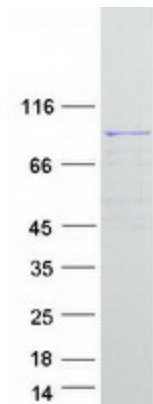
Product images:



Circular map for RC210492



Western blot validation of overexpression lysate (Cat# [LY411672]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210492 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COP1 protein (Cat# [TP310492]). The protein was produced from HEK293T cells transfected with COP1 cDNA clone (Cat# RC210492) using MegaTran 2.0 (Cat# [TT210002]).