

Product datasheet for **RC222471**

E2F3 (NM_001949) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	E2F3 (NM_001949) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	E2F3
Synonyms:	E2F-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222471 representing NM_001949
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAAAGGGAATCCAGCCGCTCTGGAGCAGTACCTGGTGACCGCCGGGGTGGGGAGGGGGCGGCTG
 TCGTCGCCGCGCGCTGCAGCCTCCATGGACAAAAGGGCACTGCTAGCCAGCCCGGCTTCGCCGCGC
 CGCCGCGCTGCCGCGCCCGGGCGCGTACATCCAGATCCTCACCACGAACACTTCCACCACCTCTGT
 TCCTCCTCCCTCAAAGCGGCGCGTAGCCGCGGCCCTCCTCCCACTGCCCGCGCGGAGCAGA
 CCGCCGCGAGCCTCCTTACACCACGCCGACGGACCCTCCAGCAGAGCCGGGCTGCTGCAGCAGCCACC
 AGCGCTGGGACGCGGCGGAGCGGCGGCGGCGGCCCTCCGGCAAAGCGAAGGCTGGAGCTAGGAGAA
 AGCGGTACATCAGTACCTCTCAGATGGTTAAAAACCCCAAGGGCAAAGGAGAGCTGACTACGAAGTC
 CAGATAGTCCAAAACCTCAAAATCTCCCTCAGAAAAACGCGGTATGATACGTCTTTGGTCTGCTCAC
 CAAGAAGTTCATTAGCTCCTGAGCCAGTACCCGATGGGGATTGGATTGAACAAGGCAGCAGAAGTG
 CTAAGAGTGCAAAAGAGAAGGATTTATGATATACCAACGTTCTGGAAGGCATCCACCTCATTAAGAAGA
 AGTCTAAAAACAACGTCCAATGGATGGGCTGCAGTCTGTCTGAGGATGGGGCATGCTGGCCAGTGTC
 AGGCCTGTCAAAGAAGTGACCGAGCTCAGTCAGGAAGAGAAGAAATTAGATGAAGTATCCAAAGCTGC
 ACCCTGGACCTCAAAGTGTAAACCGAGGATTCAGAGAATCAAAGGTTAGCTTATGTTACATATCAAGATA
 TTCGAAAATAGTGGCCTTAAAGACCAAACTGTTATAGTTGTGAAAGCCCTCCAGAAAACAGACTTGA
 AGTGCCTGACTCAATAGAGAGCTACAAATACATTTGGCAAGTACCAAGGGCCATTGAGGTTTACTTA
 TGTCCAGAAGAGACTGAAACACACAGTCCAATGAAAACAAACAACCAAGACCACAATGGGAATATCCCTA
 AACCCGTTCAAAGACTTGGCTTCAACCAACTCAGGACATAGCGATTGCTCAGTTTCTATGGAAACT
 TTCTCCTGGCCTCCCGCAACCTCTTACAGCAGACTGAGGACCAAAATTCCTTCAACCTAGAAGGA
 CCGTTTGTGAAGTACTGCCTCCCTGCTGCAAGAGGACTATCTCCTGAGCCTCGGGGAGGAGGAAGGCA
 TCAGCATCTCTCGATGCTTACGATTTGGAAAAGCTCCCACTGGTGAAGACTTCATGTGTAGT

ACGCGTACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222471 representing NM_001949
 Red=Cloning site Green=Tags(s)

MRKGIQPALEQYLVTAGGGEGAAVVAAAAASMDKRALLASPGFAAAAAAAPPAYIQILTTNTSTTSC
 SSSLQSGAVAAGPLLPSAPGAEQTAGSLLYTPHGPSSRAGLLQPPALGRGSGGGGPPAKRRELG
 SGHQYLSGLKTPKKGRAALRSPDSPKTPKSPSEKTRYDTSGLLTKKF IQLLSQSPDGLDLNKA
 EV LKVKRRIYDITNVLEGIHLIKKKSKNNVQWMGCSLSEDGM LAQCQGLSKEVTELSQEEKKLD
 ELIQSC TLDLKLLEDSENQRLAYVYQDIRKISGLKDQTVIVVKAPPETREVPDSIESLQIHLASTQ
 GPIEVYL CPEETETHSPMKTNNQDHNGNIPKASKDLASTNSGHSDCSVSMGNLSPLASPNLLQ
 QTEDQIPSNLEG PFVNLPLQLQEDYLLSLGEEGI SDFDAYDLEKLP LVEDFMCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6157_g08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001949

ORF Size: 1395 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](#)

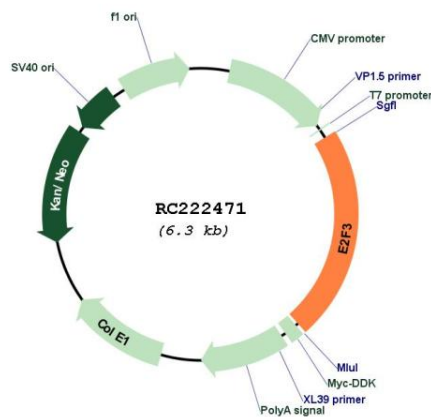
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

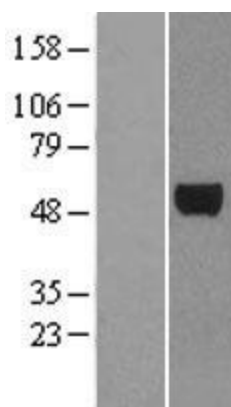
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_001949.5
RefSeq Size:	4744 bp
RefSeq ORF:	1398 bp
Locus ID:	1871
UniProt ID:	O00716
Cytogenetics:	6p22.3
Domains:	E2F_TDP
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Small cell lung cancer
MW:	49 kDa
Gene Summary:	This gene encodes a member of a small family of transcription factors that function through binding of DP interaction partner proteins. The encoded protein recognizes a specific sequence motif in DNA and interacts directly with the retinoblastoma protein (pRB) to regulate the expression of genes involved in the cell cycle. Altered copy number and activity of this gene have been observed in a number of human cancers. There are pseudogenes for this gene on chromosomes 2 and 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2013]

Product images:



Circular map for RC222471



Western blot validation of overexpression lysate (Cat# [LY400716]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222471 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).