

Product datasheet for **SC110876**

E2F3 (NM_001949) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	E2F3 (NM_001949) Human Untagged Clone
Tag:	Tag Free
Symbol:	E2F3
Synonyms:	E2F-3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC110876 sequence for NM_001949 edited (data generated by NextGen Sequencing)

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ATGAGAAAGGGAATCCAGCCCGCTCTGGAGCAGTACCTGGTGACCGCCGGGGGTGGGGAG
GGGGCGGCTGTCGTGCGCCGCCCGCTGCAGCCTCCATGGACAAAAGGGCACTGCTAGCC
AGCCCCGGCTTCGCCGCCCGCCCGCTGCCGCCGCCCGGGCGCGTACATCCAGATC
CTCACCACGAACACTTCCACCACCTCCTGTTCTCCTCCCTCAAAGCGGCGCGTAGCC
GCCGGCCCTCCTCCCCAGTGCCCCCGCGCGGAGCAGACCGCCGGCAGCCTCCTCTAC
ACCACGCCGCACGGACCCTCCAGCAGAGCCGGGCTGCTGCAGCAGCCACCAGCGCTGGGA
CGCGGCGGCAGCGCGCGCGCGGCCCTCCGGCAAAGCGAAGGCTGGAGCTAGGAGAA
AGCGGTACATCAGTACCTCTCAGATGGTTTAAAAACCCCAAGGGCAAAGGAGAGCTGCA
CTACGAAGTCCAGATAGTCCAAAACCTCCAAAATCTCCCTCAGAAAAACCGGTATGAT
ACGTCTCTTGGTCTGCTCACCAAGAAGTTCATTACGCTCCTGAGCCAGTCACCCGATGG
GTATTGGATTTGAACAAGGCAGCAGAAGTGCTAAAAGTGCAAAAGAGAAGGATTTATGAT
ATCACCAACGTTCTGGAAGGCATCCACCTCATTAAAGAAGTCTAAAAACAACGTCCAA
TGGATGGGCTGCAGTCTGTCTGAGGATGGGGCATGCTGGCCAGTGCAAGGCCTGTCA
AAAGAAGTGACCGAGCTCAGTCAGGAAGAGAAGAAATTAGATGAACTGATCCAAAGCTGC
ACCTGGACCTCAAACCTGTTAACCGAGGATTACAGAGAATCAAAGTTAGCTTATGTTACA
TATCAAGATATTCGAAAAATTAGTGGCCTTAAAGACCAAACCTGTTATAGTTGTGAAAGCC
CCTCCAGAAAACAAGACTTGAAGTGCCTGACTCAATAGAGAGCCTACAAATACATTTGGCA
AGTACCCAAGGGCCATTGAGGTTTACTTATGTCCAGAAGAGACTGAAACACACAGTCCA
ATGAAAACAAACAACCAAGACCACAATGGGAATATCCCTAAACCCGCTTCCAAAGACTTG
GCTTCAACCAACTCAGGACATAGCGATTGCTCAGTTTCTATGGGAAACCTTCTCCTCTG
GCCTCCCAGCCAACCTTTACAGCAGACTGAGGACCAAATTCCTTCCAACCTAGAAGGA
CCGTTTTGTGAACCTACTGCCTCCCTGCTGCAAGAGGACTATCTCCTGAGCCTCGGGGAG
GAGGAAGGCATCAGCATCTCTTCGATGCTTACGATTTGAAAAGCTCCCACTGGTGAA
GACTTCATGTGTAGTTGA
    
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Clone variation with respect to NM_001949.4

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_001949 unedited
GGGTAATAATTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACCGAGGGAAAAC
AATACATTAATATACCATAACACTAAAAAGAGCAGGAGCGAGAGATGAGAAAGGGAATCC
AGCCCCGCTCTGGAGCAGTACCTGGTGACCGCCGGGGTGGGGAGGGGGCGGCTGTCGTG
CCGCCGCCGCTGCATCCTCCATGGACAAAAGGGCACTGCTAGCCAGCCCCGGCTTCGCCG
CCGAGACCCTCATGACTCAACTTCTCCTGCTACAGGCACCATATCACATCAAGCCC
CATCCCCTCTGCCTAGATCATACTTTCTCTCTCCTCCTCCCACTACCTATCACTACGT
TCCATCTCAATTCAATTTGCGCACTCCACCAGATACCAACCCCTCCACCGCTTCCCTA
CCTCTCACCTCCTCAACCTTATCATTTTCTTTTACACAATCATCATCTTCTAACCCTGAC
GATCCCCGTTCCCATACACTTTTACAACCCCTCTGACCGCCTCACCCTCACTCCTCGCT
ACCATTGCTTCCCTTCTCCCTTTTACTACACTTCACTCCTCTTCTCTATCCATCTT
AGCTCCCCTCTTTTTTACCTTATCCATACCTCTATTTCACTCCTCTTTATGATTTTTTT
CTTTTTTCTCCATAACTATTTTCTCCTCCCTTCCCTCACTCCCCTTCTTTTACCTAC
TCCGACCCACTTTACTACTCCCCTCCTCAACACGCTCATTACTTCTCCTTACATTACGTG
GTTTTCGTCTCTNTCCATCCTTTCCCTCTGTATCCCAGTAGTTACTCCTCCTCTCTC
CCCTACACAACCTTCCATCACCCANAAACACACACCCTCAGGCTCTTACTAGGCTCACCT
CCTCAACTCTTATACCCTCACATTTTATCCCCTTACACCTCTCTCCTCCTTCTGTTC
TCATCCTCCCTCTTCTCCCNCTTGTCTATCCCACCTCCCTACGTGCTCCTTTCCGT
ATCCTTTCCTCTCCTATATCTCCCACCGATCTC
    
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3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001949 unedited
 CAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTCTAAGGATATTTTCAATTCAATTAAA
 CATATGAGTTGAGTGCCTACTATGTGCCTACCATTGGGTCAGGCACATAGCATTTC AATT
 TAACTGTTGTTTTGAGGTTTTGTTCTTTATCTGACTCCCTCATTCCCGCAGTCCTTATCA
 TCCAAGGAATGGACCGGAGATACTACGCCATATCCCAGTGGGAGATGGCCGCTGCCACC
 TGCCCGAGGGAAGCCATTCTTGGACATAACTGGTAGGATTTGCAGCTGACACAAAGCCT
 CCAACTTGGGACACCATTCTGAAGAGTAAAGCGGGAGACACCCTGGCATTGTTTTGCTT
 CATTTTTTACGTCCCGACTTCCCTTGGTCCAACCTATTCTTCATAGAGGAAGGGGAAC
 GGGGTCTGGCCAGAACTATTCCAGCCCCGACACAGGGCTGCTCCCTGTTCTGCCAGCT
 TAAGGAAATGCCACTCACACAATGGGGATGTCTTTCTCCCTAGAGGTCTCTCCATCTGAC
 CCCATCTGAGAAGTGGTCTCCCTGAGTGCAGTGTAAAGAGAGCCCTTTCCCTGTACAG
 GGGCCCCGGGAAGCCCAAGGATGGAGGGACCCATGCCTGCTGCTCCTTGAGGCTGTTACA
 TCATCTGACTGGTTCTCTTTCCATGGGCCACCCATGTCAGCAAGCCCCATGACTGACT
 CGCTCAAAGCTCCCCCTNCTGGGAATGGNAGCACGATGGGACAAAGCTCCTTGACAGGAGC
 TGANTAACCCTANATCACACAGGTCTTAGATGCTCTGATCAGTAAAGNTCTCTCCCTCT
 GCCTAATAATATGAATNGCAAAAACCCGCCTCAAAGTAAACATTTAAATCGGAATGGGG
 ATGGCTGCCCCAGGAAGATGCTAATGGCAGCTAAAAATTTAAAGCCTAGAACATCCCA
 AAAGAAGCTTAGTAGGCGTTTGCTACAATCANCTGGACTNCCAACCATGGGGACGGGGAA
 TGGNATGGTCATGAAACG

Restriction Sites:

NotI-NotI

ACCN:

NM_001949

Insert Size:

3150 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](#)

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:	<u>NM_001949.2, NP_001940.1</u>
RefSeq Size:	4744 bp
RefSeq ORF:	1398 bp
Locus ID:	1871
UniProt ID:	<u>O00716</u>
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1, also known as a) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>