

Product datasheet for RC224285

E2F5 (NM_001951) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	E2F5 (NM_001951) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	E2F5
Synonyms:	E2F-5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224285 representing NM_001951 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCGCAGAGCCCGCGAGCTCGGGCCAGCAGGCGCCGGCAGGGCAGGGCCAGGGCCAGCGGCCG
CGCCGAGCCTCCGAGGCGCAAGCCCCGAGCCGCCCGCCCGCAGCTCGGGGGCGCCGGGGCGG
CAGCAGCAGGCACGAGAAGAGCCTGGGGCTGCTACTACCAAGTTCGTGTCGCTGCTGCAGGAGGCCAAG
GACGGCGTTCTGGATCTCAAAGCGGCTGCTGATACTTTGGCTGTGAGGCAAAAAAGGAGAATTTATGATA
TCACCAATGTCTTAGAGGAATTGACTTGATTGAAAAAAGTCAAAAAACAGTATCCAGTGGAAAGGTGT
AGGTGCTGGCTGTAATACTAAAGAAGTCATAGATAGATTAAGATATCTTAAAGCTGAAATGAAGATCTA
GAACTGAAGAAAAGAACTTGATCAGCAGAAAGTTGTGGCTACAGCAAAGCATCAAAAATGTGATGGACG
ATTCCATTAATAATAGATTTTCCTATGTAACATGAAGACATCTGTAATTGCTTTAATGGTGATACACT
TTTGGCCATTCAGGCACCTTCTGGTACACAACCTGGAGGTACCCATTCCAGAAATGGGTGAGAATGGACAA
AAGAAATACCAGATCAATCTAAAGAGTCATTGAGGACCTATCCATGTGCTGCTTATAAATAAGAGTCGA
GTTTCATCTAAGCCGTTGGTTTTCTGTCCCCACCTGATGACCTCACACAGCCTTCTCCAGTCCTT
GACTCCAGTGACTCCACAGAAATCCAGCATGGCAACTCAAAATCTGCCTGAGCAACATGTCTCTGAAAGA
AGCCAGGCTCTGCAGCAGACATCAGCTACAGATATATCTTCAGCAGGATCTATTAGTGGAGATATCATTG
ATGAGTTAATGTCTTCTGACGTGTTTCTCTCTTAAGGCTTCTCTACCCGGCAGATGACTACAACCT
TAATTTAGATGATAACGAAGGAGTTTGTGATCTGTTTGTGATGTCAGATACTAAATTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224285 representing NM_001951
Red=Cloning site Green=Tags(s)

MAAAEPASSGQQAPAGQGGQRPQPQPQAQAPQPPPPQLGGAGGSSRHEKSLGLLTTKFVSLLEAK
 DGVLDLAAAADTLAVRQKRRIYDITNVLEGLDIEKSKNSIQWKGVGAGCNTKEVIDRLRYLKAIEDL
 ELKERELDQQLWLQOSIKNVMDDSIINRF SYVTHEICNCFNGDTLLAIQAPSGTQLEVPPEMGQNGQ
 KKYQINLKSHSGPIHVLLINKESSSSKPVVFPVPPDDLTPVTPQKSSMATQNLPEQHVSR
 SQALQQT SATDISSAGSISGDIIDELMSSDVFP LLRLSPTADDYFNLDNNEGVCDLFDVQILNY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001951

ORF Size: 1038 bp

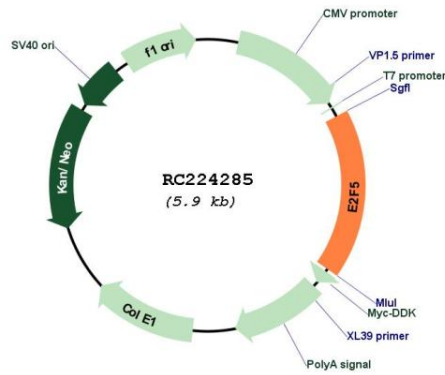
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

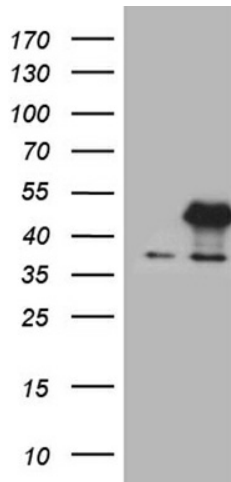
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_001951.4
RefSeq Size:	1752 bp
RefSeq ORF:	1041 bp
Locus ID:	1875
UniProt ID:	Q15329
Cytogenetics:	8q21.2
Domains:	E2F_TDP
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Cell cycle, TGF-beta signaling pathway
MW:	37.4 kDa
Gene Summary:	<p>The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionarily conserved domains that are present in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein is differentially phosphorylated and is expressed in a wide variety of human tissues. It has higher identity to E2F4 than to other family members. Both this protein and E2F4 interact with tumor suppressor proteins p130 and p107, but not with pRB. Alternative splicing results in multiple variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p>

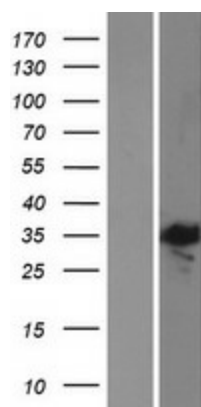
Product images:



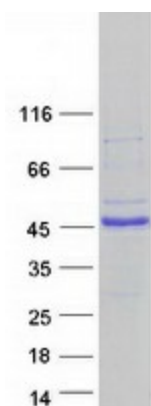
Circular map for RC224285



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY E2F5 (Cat# RC224285, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-E2F5 (Cat# [TA810672])(1:2000). Positive lysates [LY419631] (100ug) and [LC419631] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419631]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224285 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified E2F5 protein (Cat# [TP324285]). The protein was produced from HEK293T cells transfected with E2F5 cDNA clone (Cat# RC224285) using MegaTran 2.0 (Cat# [TT210002]).