

## **Product datasheet for RN211801**

## E2f7 (NM\_001108092) Rat Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: E2f7 (NM\_001108092) Rat Untagged Clone

Tag: Tag Free

Symbol: E2f7

Synonyms: E2F-7

**Vector:** pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

**Cell Selection:** Neomycin

## OriGene Technologies, Inc.

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Fully Sequenced ORF: >RN211801 representing NM\_001108092

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGGTAAATTGTTTAACACTAAAAGACTTGATCAGCCCCAGGCAGACCAGACTAGATTTTGCCGTTG GAAAAATGAACCCATCGATCTGTCAAAGCAAAGAATCTTTACTCCGGAAAGAAGTCCCATTACTCCGGTA AAGCTGGTGGACCGGCAGCCGCAGGTGGAACCGTGGACACCCACGGCCAACCTGAAGATGCTCATCAGTG CGGCCAGCCCAGACATAAGGGACCGGGAGAAGAAAAAGGAGCTGTTCAGACCCATTGAGAATAAGGGGGGA TGCATTTGTGAACTCCCTGCAGCTTGATGTGGTTGGCGACAGTGCTGTGGATGACTACGAGAAGCGAAGG CCAAGCAGGAAACAGAAGATTGGGGCTGCTGTGCCAGAAGTTTCTAGCTCGCTATCCAAGCTACCCCT TGTCCACGGAGAAAACCACCATCTCCCTGGATGAGGTCGCCGTCAGCCTTGGTGTGGAAAGGAGACGCAT CTATGACATCGTAAATGTGCTGGAGTCTCTGCATCTGGTCAGCCGGGTAGCTAAGAATCAGTATGGTTGG CATGGTCGGCACAGCCTTCCCAAAACCCTGCGGACCCTACAGAGACTGGGAGAGGAACAGAAATACGAGG AGCAGATGGCCTGCCTCCAGCAGAAGGAGCTGGACCTGATGGAGTATAGGTTTGGAGAACGCAGGAAAGA TGGGTCTCCAGATCCCCGAGATCAACACCTACTCGATTTTTCTGAATCCGACTACCCCTCTTCATCTGCA AACAGTCGAAAAGATAAATCTCTAAGAATTATGAGCCAGAAGTTTGTCATGCTGTTCCTCGTCTCAAAA CCAAGATTGTTACCCTGGATGTAGCTGCCAAAATCCTCATAGAAGAAAGCCAAGATACCCCGGACCACAG TAAATTCAAAACAAAGGTACGGAGGCTCTATGACATAGCCAATGTGCTGACCAGCTTGGCTCTGATAAAG AAAGTTCACGTGACAGAAGAGCGAGGCCGCAAACCAGCCTTCAAATGGATCGGGCCCGTGGACTTCAGCT CCATTGATGAAGAACTCTTGGACGTCTCTGCATCTGTCTTACCGGAACTGAAGAAGAAGAACATATGGTCA GATTCGAGTGTGCAAAAGAGAGGCTGGCGCGCTACGGTTCCTTTAACACGGTTCAGACATCTGAGAAG ATACAGAGAAAAGTGAACTCCGAGCCCAGCAGCCCACAGGGAGAAAACAAGGGCCAGCCTATTCCCTGG AAATTGGGAGTCTGGCCGCCATCTACAGACAGAAAGTAGAAGACAGTTCGCAGGGGGAAGCCTTTGTCAA TAAGAGAGCTGCACCTCCAGCAAGTGTCTTGGACCCTACCCTCCTGTTGACTCCGAATACTGTGTTAAG CCTTTAGCCCAGCCAGTATTTTCTGTCGCGCAAACAGAAAACCCTCAAATTCCACAGACCTCGCCTTTCC **TGTGA** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001108092

**Insert Size:** 1545 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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 001108092.1</u>, <u>NP 001101562.1</u>

RefSeq Size: 3369 bp
RefSeq ORF: 1545 bp
Locus ID: 314818
Cytogenetics: 7q22

**Gene Summary:** 

Atypical E2F transcription factor that participates in various processes such as angiogenesis, polyploidization of specialized cells and DNA damage response. Mainly acts as a transcription repressor that binds DNA independently of DP proteins and specifically recognizes the E2 recognition site 5'-TTTC[CG]CGC-3'. Directly represses transcription of classical E2F transcription factors such as E2F1. Acts as a regulator of S-phase by recognizing and binding the E2-related site 5'-TTCCCGCC-3' and mediating repression of G1/S-regulated genes. Plays a key role in polyploidization of cells in placenta and liver by regulating the endocycle, probably by repressing genes promoting cytokinesis and antagonizing action of classical E2F proteins (E2F1, E2F2 and/or E2F3). Required for placental development by promoting polyploidization of trophoblast giant cells. Also involved in DNA damage response: up-regulated by p53/TP53 following genotoxic stress and acts as a downstream effector of p53/TP53-dependent repression by mediating repression of indirect p53/TP53 target genes involved in DNA replication. Acts as a promoter of sprouting angiogenesis, possibly by acting as a transcription activator: associates with HIF1A, recognizes and binds the VEGFA promoter, which is different from canonical E2 recognition site, and activates expression of the VEGFA gene. Acts as a negative regulator of keratinocyte differentiation (By similarity). [UniProtKB/Swiss-Prot Function]