

## Product datasheet for **SC122267**

### **E2F2 (BC007609) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	E2F2 (BC007609) Human Untagged Clone
Tag:	Tag Free
Symbol:	E2F2
Synonyms:	E2F-2; E2F transcription factor 2; OTTHUMP00000003257
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

>OriGene sequence for BC007609 edited  
 CTAGAATGCTAATTGCACTTAGGCCTCATGGTTCTAGTAAACGGCAGCTGTGGGCCCTTT  
 TGCCCTCTCCCCTGTTCTTGGCCTCACATCTCCAGCTGAGCTGCCGGTCTTGGCTTCCCTG  
 GTCGCCTCTGTCCAGAGATGGTCCCAGGGAGCCATCCTAGGGCAGGTAGCACTGAGGCT  
 CCTGTGGAACAGGAGCCACCTGCTCAGGAGACCCCTTCTGAGGAAGTCTTACCTCT  
 CCCCTTGAGATGTAAAAATGGTCCAGCAGAGACAAGCTCCCGTGGAAAACAGACAGGAGC  
 ATGGGGGCAGCTGTCAATGGCTGTGGCGGGCACTTTTCTCAGAGTTTCTGCGCTTGGCGTG  
 GTCCAGGAGCCATTTTGACCAAGGACTTGGTAGGCAGAGGCAGCCCACTGTAAAGAAG  
 GGTGAGATTAACAACAAAAAAGTCCAAAAAGCATCCCTCTGCCCCCATGTGGCACTGGC  
 ATCATTCTCTGCTTCCCTGGGAGGAATTTTTTACCATGTTATTGAAGGGGATGGTTCAT  
 TAAGGACTCCACCCCTCAGAGCTCACTCAGACCCCAAGGACAGAGGTGACTGGGGCTTGG  
 TGACTTGTTCACCTTTTTTCCAGGTATACTGAAGGGGTGACAGAGAGAGGTCTTCAT  
 GGCAGACCAGGCCTTACAGCTAATGGGGAGAGGAACATGTTACCTCTGCAGGCCTGG  
 GGTCTGAGGGGGTCTTTGGCTTCCAGCCTGTTCCCCAGAGGCTTGATCATCCACATT  
 GTCCTTTCAGCTCAGCTGCTTCTTCCCCACCCACCCTGGGATGTGGGTGCTCTGGGCT  
 GAACCAAGGCTATGACTTCTGGAGAGAGGCTCAGGGGTTGGTCTGAGAGGCTGCCATCC  
 ACCCTCAGGGAGCTAGTTTTCTCAGAGGCTCAGCTGGACAGCACTTTTTAGAAAAGTT  
 TGTAGCATTAAAGCTGGTTAAAAATGAAGTTGGTTTTGTTGGATGGCTCCTGAGCTGAC  
 TGACTGATGTCTGAAGTTGAGACGAGGGATTATTTAGGGTGGGGCCCAATGTGATCTA  
 ATGCCAGCTGGGGACAATTGTGCCTCATCTTTGCTCAAATTCCTGGGCCCCCAAGTTA  
 GCCCCTCCCAGGAGTGGTCAGCGGGTCCAGCTGCCCCACTCTATAAGCAGGGCTAAT  
 TGTGTACCCTTTGAGAAATGCTTTTGGTCTCTACCCAAATACTCACAAGGGTCTTATC  
 AGACCCCGTCTTAAAGTCCAGCATGCTCAGGGACCCTGTGAGGATCTCGTTTTGTGGTG  
 AGTGGGCTGCTCTGAGGTCTCCACTGGGCTGCCATTTAGCCATGTGCCATCTCTGAAGTC  
 AGAGGTGTTTACTCCCATTCTTGGGCTCTGGAGCTTTCCCAAGAATTACATCAGAGA  
 AAAGGAAGAAGGGGCTGCAGGACCCATTGGGAATGAGTTAATACTGAAGTCTGGAATG  
 TAAGCTCATGCCCTAGAGGCTCTCCATATGGCTGGTCAGGGGAGCTGCCCTCAGGCTTG  
 TGCCCGTGTGCTCAGCAGCTGCCTCTGTCCCTCTACTGTCCCTTTCACACCTTGCT  
 GGCCAAGGGGCTAGACCTCCCAGGCTAAGCCTCAGATTCAGTGCAGGACACAAGCTCATG  
 CCCCCGCTTGCCAGTGACACTGAAGCCTCCCGACTTCCACAGAGTGCTTCAGGACACA  
 TTTTGAGTGGTATTTCTTTCTTTTTTCTTTTCTTTTTTTTTTTTTTTGAGATGGAGTCTC  
 GCTCTGTTGCCAGGCTGGAGTGCAGTGGCCTGATCTCGGCTCACTGCAACCTCTGCCTC  
 CCAGGTTCAAGCGATTCTTCTGCCTCAGCCTCCAGAGTAGCTGGGACTATAGACATGCAC  
 CACCACGCCCGGCTAATTTTGTATTTTGGTCGAGACGGGGTTTTGCCATGTTAGTCAGG  
 CTGGTCTTGAACCTCTGACCTCAAGTATCCACCCTCGGCCTCCCAAAGTGTGAGAT  
 GACAGGCACGAGCCACCAGGCCAGCCTGAGTGGTATTTCTTTAGGGACCAGGTAGACT  
 TTAACACGAGGGTAAGAGAAAAGCCAGTGTCTTCTGAGGTAATAATTTCTGCCAGGAA  
 ACTTCCAGCCCCACCAGCAGCCCCCTAAAAAATCACTCGTGTCCCAGGGACTTCTA  
 AAGCTTGGGGCTCCAGGAAATCATCCAGTAGAGTTGGAGATTGAGAGATTCTTGAAGCC  
 AGGGACATGCTCCTAACTCCTTTCCATTAAAGGTGTTAGAATAGACCAGAGGGTGTCCC  
 TTTCCACAGTAATGGGATCGGCTGGTGTGCTTCCAGGGAGGAAGAGGGAGGTGGTCAAG  
 CTTGAAAACTGGCTTTAGGATGGTTCTGACTTTGTTCTCCCTCCCAAGTGTCTCAAC  
 CTCCATTCTGCAGTGTTGAGTTTTAGGGAAAGGGTTTGGGTGCCCCAGCATCCAGGTG  
 TTGTGTGGCTTAGCGCATGTGAAGTGAACCTTCTGGGTTGTTTGAAGCAGCTTTCT  
 GGTCTTGTGATTGTATCCTGAGGTCCCAGAACCTATTCTCCACGAGGATCCTCAGTG  
 ACCATGGTGGCCACAGCCTGGCCAGCCTGCTGGCTCCTGGGTGAGCTGAAGAACCTTGC  
 CTGTGGCACTTTTCGAGGGTGTGCTGGAACCGAGAGAACATGGTCCCGTGTGGGACTC  
 ATGCGGGTCATTTCTGCGGCCTGGTTTCCGCTGGTCTGTCTTTATGAGCACCATGTA  
 AGCCTCCTGTATTGAGATAATTGGGCATTAACATTAATACTGCAGCTCTGGGAAAAAAA  
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAC

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC007609 unedited AGCGTACAAAATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCTAGAA TGCTAATTGCACTTAGGCCTCATGGTTCTAGTAAACGGCAGCTGTGGGCCCTTTTGCCTC TTCCCCTGTTCTTGGCCTCACATCTCCAGCTGAGCTGCCGGTCTTGGCTTCTGGTCGCC TCTGTCCCAGAGATGGTCCCAGGGAGCCATCCTAGGGCAGGTAGCACTGAGGCTCCTGTG GAAACAGGAGCCACCTGCTCAGGAGACCCTTTCTGAGGAAGTCCTTACCTCTCCCCTT GAGATGTAAAAATGGTCCAGCAGAGACAAGCTCCCGTGGAAAACAGACAGGAGCATGGGG GCAGCTGTCATGGCTGTGGCGGGCACTTTTCTCAGAGTTTCTGCCTTGCCTGGTCCAG GAGCCATTTTGCACCAAGGACTTGGTAGGCAGAGGCAGCCCCACTGTAAAGAAGGGTCAG ATTAACAAACAAAACTGCCAAAAGCATCCCCTCTGCCCCCATGTGGCACTGGCATCATT CTCTGTTCCCTGGGAGGAATTTTTTACCATGTTATTGAAGGGGATGGTTCATTAAGGA CTCCACCCTCAGAGCTCACTCAGACCCCAAGGACAGAGGTGACTGGGGCTTGGTGACTT GTTCACTCCTTTTTTCCCAGTATACTGAANGGGTGACAGAGAGAGGTCTTCATGGCAGA CCAGGCCCTCACAGCTAATGGGGAGAGGAAGTCACTGTTACCTCTGCAGGCCTGGGGTCCC TGAGGGGTCTTTTGGCTTCAAGCCTGTTCCCCAGAAGCTTGATCATCCACATTGTCCTT TCAGCTCAGCTGCTTCTTCCCCACCCACCCTGGGATGGTGGTCTCTGGGCCTGACCC AAGCTATGACTTCTG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	BC007609
<b>Insert Size:</b>	2917 bp
<b>OTI Disclaimer:</b>	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).
<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>RefSeq:</b>	<a href="#">BC007609.1</a> , <a href="#">AAH07609.1</a>
<b>RefSeq Size:</b>	2917 bp
<b>Locus ID:</b>	1870
<b>Cytogenetics:</b>	1p36.12
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	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:**

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 evolutionally conserved domains found 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 and another 2 members, E2F1 and E2F3, have an additional cyclin binding domain. This protein binds specifically to retinoblastoma protein pRB in a cell-cycle dependent manner, and it exhibits overall 46% amino acid identity to E2F1. [provided by RefSeq, Jul 2008]