

## Product datasheet for **RR201966**

### **EII3 (NM\_001011957) Rat Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** EII3 (NM\_001011957) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** EII3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR201966 representing NM\_001011957  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAGGGGACCCAGGAAGCTCTGAGTGGGAAAATGCGGGCTCCTCTTACCCTGCTGCTCGAACCAGCC  
TCCTGATGCTAAGACTCAACGAGGCGCGCTGCGGGCACTACAAGAGTGTGAGCAGCAACAGGTACGGCC  
AGTGATCGCTTTCCAAGGCCAACGAGGGTATCTAAGGCTCCAGGTCTGGATGGTCTGCTCTTCTCC  
TTCATAGTATCCCAAGTGTGGCCAAGAGGGTGGTGGCTTGACCTTGTGTACCAACGCTTAGCGAGATCTG  
GGCCTAACTGTCTCCACTGCCTGGGCTCACTGAGAGAGCGACTTACTATTTGGGAGCCATGGATACGAT  
CCCAGCTCCACTGTTAGCTCAGGAACACCTGACTGAAGGTACCAGAGAGTCTGAGAGCTGGCAGGACAGC  
GAAGATGAACCTGAAGGCCATCCCAGATGGCACTACAAGAGGTGTCTGACCCACTGGCAAGCAACCATG  
AACAGTCACTCCAGGATCCTCCAGTGAGCCATGGCACAGTGGGAAGTGAGAAACCACACTTACCTTTC  
AAACAGAGAGCCTGATCAGCCACTGCCTTCTCTGCTAGCCAGAAACGCTGGACAAGAAACGTTTCAGCA  
CCTATAACCACTGAAGAACCAGAGGAAAAAGGCCAGAGCTCTGCCTTCTAGCCTCAAGTCCACTACAAG  
GACTATCAAATCAGGACTCACCAGAGGAACAAGACTGGGGCAAGATGCAGATGGAGATTCCAGGCTGGA  
GCAGAGTCTCTCAGTTCAATCAGCTTCTGAATCCCAAGCCCTGAGGAGGTACCAGATTATCTCCTGCAA  
TACAGCACCATCCACAGTGCAGAGCAGCAGGCTACGAGCAGGACTTTGAGACCGACTATGCTGAAT  
ACCGCATTCTGCACGCCCGTGTGCGGGCTGCAAGCCAGAGGTTACAGAGCTGGGGGAGAGATCAAGAG  
ACTTCAGCGAGGAACTCCAGAGCACAAGGTGCTAGAAGACAAGATAGTCCAGGAGTATAAAAAGTTTCAGA  
AAGCGGTATCCCAGTTACAGCGAGGAGAAGCGGCTGTGAGTACCTGCATGAGAACTGTCCCACATTA  
AAGGTCTCATCTGGAATTTGAGGAAAAGAACAGGGGCAGCAAGGTCTCATCTGGAATTTGAGGAAAAG  
AACAGGGGCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RR201966 representing NM\_001011957  
 Red=Cloning site Green=Tags(s)

MEGTQEALSGKMRLLFPAARTSLLMLRLNEAALRALQECQQQVRPVIAFQGQRGYLRPLPGPGWSCLF  
 FIVSQCGQEGGLDLVYQRLGRSGPNCLHCLGSLRERLTIWAAMDTIPAPLLAQEHLTEGTRESESWQDS  
 EDEPEGHPQMALQEVSDPLASNHEQSLPGSSSEPMAQWEVRNHTYLSNREPDQPLPSSASQKRLDKKRS  
 PITTEEPKRPALPLASSPLQGLSNQDSPEEQDWGDADGDSRLEQSLSVQSASESPSPPEEVPDYLLQ  
 YSTIHSAEQQQAYEQDFETDYAEYRILHARVGAASQRFTELGAELKRLQRGTPEHKVLEDKIVQEYKFR  
 KRYPSYSEKRRCEYLHEKLSHIKGLILEFEENRGSKVSSWNLKRRTGA

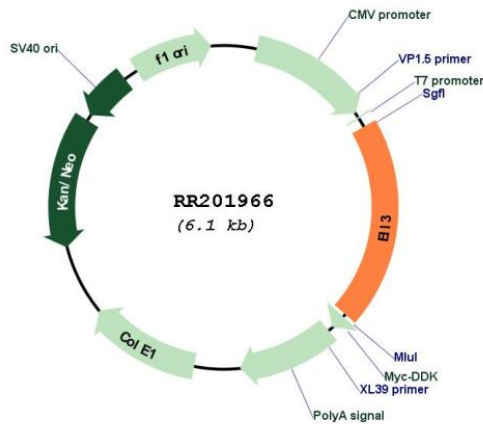
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001011957

<b>ORF Size:</b>	1161 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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 Size:</b>	1660 bp
<b>RefSeq ORF:</b>	1164 bp
<b>Locus ID:</b>	296102
<b>UniProt ID:</b>	<a href="#">Q5XFX8</a>
<b>Cytogenetics:</b>	3q35
<b>MW:</b>	43.8 kDa
<b>Gene Summary:</b>	Enhancer-binding elongation factor that specifically binds enhancers in embryonic stem cells (ES cells), marks them, and is required for their future activation during stem cell specification. Elongation factor component of the super elongation complex (SEC), a complex required to increase the catalytic rate of RNA polymerase II transcription by suppressing transient pausing by the polymerase at multiple sites along the DNA. Component of the little elongation complex (LEC), a complex required to regulate small nuclear RNA (snRNA) gene transcription by RNA polymerase II and III. Does not only bind to enhancer regions of active genes, but also marks the enhancers that are in a poised or inactive state in ES cells and is required for establishing proper RNA polymerase II occupancy at developmentally regulated genes in a cohesin-dependent manner. Probably required for priming developmentally regulated genes for later recruitment of the super elongation complex (SEC), for transcriptional activation during differentiation. Required for recruitment of P-TEFb within SEC during differentiation. Probably preloaded on germ cell chromatin, suggesting that it may prime gene activation by marking enhancers as early as in the germ cells. Promoting epithelial-mesenchymal transition (EMT) (By similarity).[UniProtKB/Swiss-Prot Function]