

Product datasheet for **RN201966**

EII3 (NM_001011957) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: EII3 (NM_001011957) Rat Untagged Clone
Tag: Tag Free
Symbol: EII3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >RN201966 representing NM_001011957
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGGGACCCAGGAAGCTCTGAGTGGGAAAATGCGGCTCCTCTTCACCCCTGCTGCTCGAACCAGCC
TCCTGATGCTAAGACTCAACGAGGCGCGCTGCGGCACTACAAGAGTGTGAGCAGCAACAGGTACGGCC
AGTGATCGCTTCCAAGGCCAACGAGGGTATCTAAGGCTCCCAGGTCCTGGATGGTCTGCCTCTTCTCC
TTCATAGTATCCAGTGTGGCCAAGAGGGTGGTGGCTTGGACCTGTGTACCAACGCTTAGGCAGATCTG
GGCCTAACTGTCTCCACTGCCTGGCTCACTGAGAGAGCGACTACTATTTGGCAGCCATGGATACGAT
CCCAGTCCACTGTTAGCTCAGGAACACCTGACTGAAGGTACCAGAGAGTCTGAGAGCTGGCAGGACAGC
GAAGATGAACCTGAAGGCCATCCCAGATGGCACTACAAGAGGTGTCTGACCCACTGGCAAGCAACCATG
AACAGTCACTCCCAGGATCCTCCAGTGAGCCATGGCACAGTGGGAAGTGAAGAAACCACTTACCTTTC
AAACAGAGAGCCTGATCAGCCACTGCCTTCTCTGCTAGCCAGAAACGCCTGGACAAGAAACGTTTCAGCA
CCTATAACCACTGAAGAACCAGAGGAAAAAGGCCAGAGCTCTGCCTTAGCCTCAAGTCCACTACAAG
GACTATCAAATCAGGACTCACCAGAGGAACAAGACTGGGGCAAGATGCAGATGGAGATTCCAGGCTGGA
GCAGAGTCTCTCAGTTCAATCAGCTTCTGAATCCCCAAGCCCTGAGGAGGTACCAGATTATCTCCTGCAA
TACAGCACCATCCACAGTGCAGAGCAGCAGGCTACGAGCAGGACTTTGAGACCGACTATGCTGAAT
ACCGCATTCTGCACGCCGTGTGCGGGCTGCAAGCCAGAGGTTACAGAGCTGGGGCAGAGATCAAGAG
ACTTCAGCGAGGAACCTCAGAGCACAAGGTGCTAGAAGACAAGATAGTCCAGGAGTATAAAAAGTTCAGA
AAGCGGTATCCCAGTTACAGCGAGGAGAAGCGGCTGTGAGTACCTGCATGAGAAAAGTGTCCACATTA
AAGGTCTCATCTGGAATTTGAGGAAAAGAACAGGGGCAGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAAGGTTTAA

Restriction Sites: SgfI-MluI



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ACCN:	NM_001011957
Insert Size:	1164 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:	<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:	<u>NM_001011957.1</u> , <u>NP_001011957.1</u>
RefSeq Size:	1660 bp
RefSeq ORF:	1164 bp
Locus ID:	296102
UniProt ID:	<u>Q5XFX8</u>
Cytogenetics:	3q35
Gene Summary:	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]