

Product datasheet for MC226223

Rprd1b (NM 001291136) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rprd1b (NM_001291136) Mouse Untagged Clone

Tag: Tag Free
Symbol: Rprd1b

Synonyms: 2610304G08Rik; 2810446G03Rik; Crept

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC226223 representing NM_001291136

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAGGACTCCAAGAGCCCTCCCCCAAAGCAGAAGAAGAAGAAGTCTCTAAAACGAACTTTTCAGCAGA
TACAAGAGGAGGAAGATGATGACTACCCTGGAAGCTACTCTCCCCAAGACCCTTCTGCAGGCCCTCTCTT
GACTGAGGAGTTAATCAAAGCTTTGCAGGATCTGGAAAATGCTGCGTCAGGGGATGCTACTGTCCGACAG
AAGATCGCTTCCCTGCCTCAGGAAGTGCAAGACGTGTCGCTGCTAGAGAAAATTACAGACCAAGAGGCAG
CTGAACGTCTTTCAAAAACAGTAGATGAAGCATGTCTGTTACTAGCGGAATATAACGGGCGCCTGGCAGC
GGAACTGGAAGACCGGCGCCAGCTGGCTCGGATGCTGGTGGAATACACCCAGAACCAGAAAGAGGTTTTG
TCAGAAAAAAGAGAAAAAACTAGAAGAGTATAAAACAGAAGCTTGCTCGAGTAACCCAGGTCCCCAAGGAAC
TCAAGTCCCACATTCAGAGCTTGCCAAGACCTTTCCAAAGTCCCAATGTCACAGGGGGCCTGGCACCTCT

 ${\tt GCCCTCTGCTGGTGACCTCTTTTCAACTGAC{\color{red}{\sf TAG}}}$

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001291136

Insert Size: 594 bp



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Rprd1b (NM_001291136) Mouse Untagged Clone - MC226223

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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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 001291136.1</u>, <u>NP 001278065.1</u>

2 H1

 RefSeq Size:
 4387 bp

 RefSeq ORF:
 594 bp

 Locus ID:
 70470

 UniProt ID:
 Q9CSU0

Cytogenetics:

Gene Summary: Interacts with phosphorylated C-terminal heptapeptide repeat domain (CTD) of the largest

RNA polymerase II subunit POLR2A, and participates in dephosphorylation of the CTD. Transcriptional regulator which enhances expression of CCND1. Promotes binding of RNA polymerase II to the CCDN1 promoter and to the termination region before the poly-A site but decreases its binding after the poly-A site. Prevents RNA polymerase II from reading through the 3' end termination site and may allow it to be recruited back to the promoter through promotion of the formation of a chromatin loop. Also enhances the transcription of a number of other cell cycle-related genes including CDK2, CDK4, CDK6 and cyclin-E but not CDKN1A, CDKN1B or cyclin-A. Promotes cell proliferation (By similarity).[UniProtKB/Swiss-Prot

Function]

Transcript Variant: This variant (4) lacks an alternate exon in the 5' region, and it thus differs in its 5' UTR and initiates translation at a downstream in-frame start codon, and it also uses an alternate in-frame splice site in the central coding region, compared to variant 1. The encoded

isoform (d) is shorter at the N-terminus, compared to isoform a.