

Product datasheet for RC211344

POLR2G (NM_002696) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: POLR2G (NM_002696) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: POLR2G
Synonyms: hRPB19; hsRPB7; RPB7; RPB19
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC211344 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCTACCATATCTCCCTAGAGCAGAAATCCTGCTGCACCCGCGCTACTTCGGCCCCAACTTGCTCA
ACACGGTGAAGCAGAAGCTCTTCACCGAGGTGGAGGGGACCTGCACAGGGAAGTATGGCTTTGTAATTGC
TGTCACCACCATTGACAATTTGGTGTGGTGTGATCCAGCCAGGCCGAGGCTTTGCTCTTTATCCAGTT
AAGTACAAGGCCATTGTTTTCCGGCCATTTAAAGGGGAGGTCTGGATGCTGTTGTCACTCAGGTCAACA
AGGTTGGACTCTCACAGAAATGGGCCATGTCTTGCTTCATCTCTCGACATTCATCCCTTCAGAGAT
GGAGTTTGATCCTAACTCCAACCCACCATGTTACAAGACAATGGATGAGGATATTGTGATTCAGCAGGAC
GATGAGATCCGCTTAAAGATTGTGGGGACCCGTGTGGACAAGAATGACATTTTTGCTATTGGCTCCCTGA
TGGACGATTACTTGGGGCTTGTAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211344 protein sequence
Red=Cloning site Green=Tags(s)

MFYHISLEHEILLHPRYFGPNLLNTVKQKLFTEVEGTCTGKYGFVIAVTTIDNIGAGVIQPRGFVLYPV
KYKAIVFRPFKGEVVDVAVVTQVNVKGLFTEIGPMSCFISRHSIPSEMEFDPNSNPPCYKTMDEDIVIQD
DEIRLKIIVGTRVDKNDIFAIGSLMDDYGLVLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6370_a09.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002696

ORF Size: 516 bp

OTI Disclaimer: 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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

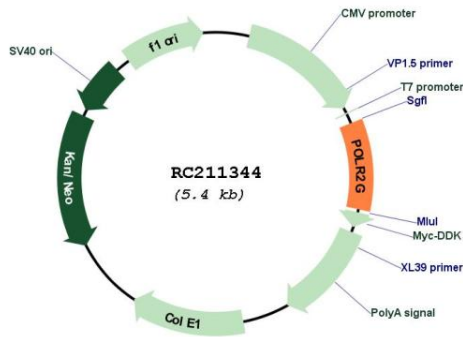
RefSeq: [NM_002696.3](#)

RefSeq Size: 852 bp

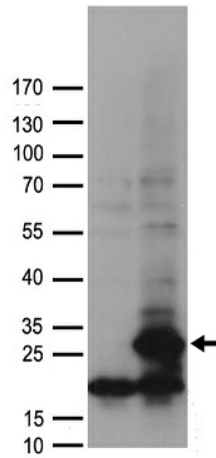
RefSeq ORF: 519 bp

Locus ID: 5436
UniProt ID: [P62487](#)
Cytogenetics: 11q12.3
Domains: S1, RNA_pol_Rpb7_N
Protein Families: Transcription Factors
Protein Pathways: Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase
MW: 19.3 kDa
Gene Summary: This gene encodes the seventh largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The protein functions in transcription initiation, and is also thought to help stabilize transcribing polymerase molecules during elongation. [provided by RefSeq, Jan 2009]

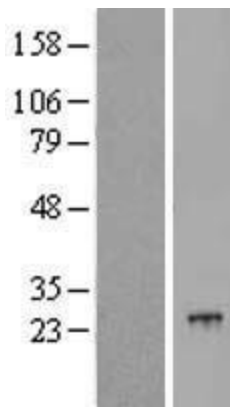
Product images:



Circular map for RC211344



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY POLR2G (Cat# RC211344, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-POLR2G antibody (Cat# [TA890034]). Positive lysates [LY419162] (100ug) and [LC419162] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419162]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211344 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).