

## Product datasheet for RC201116

### POLR2D (NM\_004805) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	POLR2D (NM_004805) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POLR2D
Synonyms:	HSRBP4; HSRPB4; RBP4; RPB4; RPB16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201116 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCGGCGGGTGGCAGCGATCCGCGGGCTGGCGACGTAGAGGAGGACGCCTCACAGCTCATCTTTCCTA  
 AAGAGTTTGAAACAGCTGAGACACTTCTAAATTCAGAAGTTCATATGCTTCTGGAACATCGAAAGCAGCA  
 GAATGAGAGTGCAGAGGACGAACAGGAGCTCTCAGAAGTCTTCATGAAAACATTAACTACACAGCCCGT  
 TTCAGTCGTTTCAAAAACAGAGAGACCATTGCCAGTGTTCGTAGCTTGTCTACTCCAGAAAAAGCTTCATA  
 AGTTTGAGTTGGCCTGTTTGCCAACCTTTGCCAGAGACTGCTGAGGAGTCCAAGGCTCTAATCCCAAG  
 CTTGGAGGGACGGTTTGAAGATGAGGAGCTGCAGCAGATTCTTGATGATATCCAGACAAAGCGCAGCTTT  
 CAGTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC201116 protein sequence Red=Cloning site Green=Tags(s)
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MAAGGSDPRAGDVEEDASQLIFPKEFETAETLLNSEVHMLLEHRKQQNESAEDEQELSEVFMKTLNYTAR  
 FSRFKNRETIASVRSLLLQKKLHKFELACLANLCPETAESKALIPSLEGRFEDEELQQILDIDITQKRSF  
 QY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6053_c05.zip">https://cdn.origene.com/chromatograms/mk6053_c05.zip</a>
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_004805

ORF Size: 426 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

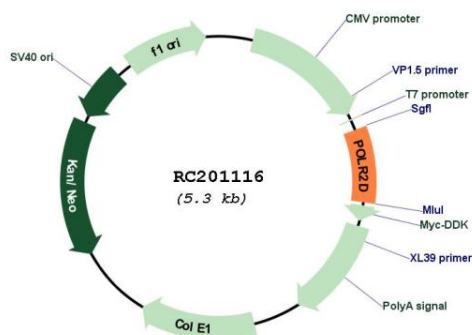
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.

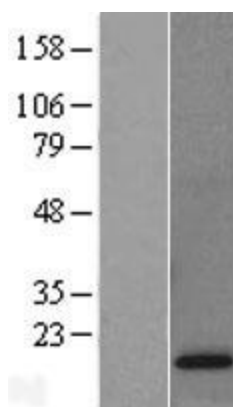
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<u>NM_004805.4</u>
<b>RefSeq Size:</b>	2338 bp
<b>RefSeq ORF:</b>	429 bp
<b>Locus ID:</b>	5433
<b>UniProt ID:</b>	<u>Q15514</u>
<b>Cytogenetics:</b>	2q14.3
<b>Domains:</b>	RNA_pol_Rpb4, RPOL4c
<b>Protein Families:</b>	Transcription Factors
<b>Protein Pathways:</b>	Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase
<b>MW:</b>	16.3 kDa
<b>Gene Summary:</b>	This gene encodes the fourth largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. In yeast, this polymerase subunit is associated with the polymerase under suboptimal growth conditions and may have a stress protective role. A sequence for a ribosomal pseudogene is contained within the 3' untranslated region of the transcript from this gene. [provided by RefSeq, Jul 2008]

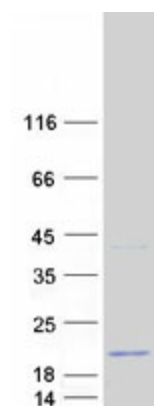
## Product images:



Circular map for RC201116



Western blot validation of overexpression lysate (Cat# [LY417740]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201116 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified POLR2D protein (Cat# [TP301116]). The protein was produced from HEK293T cells transfected with POLR2D cDNA clone (Cat# RC201116) using MegaTran 2.0 (Cat# [TT210002]).