

Product datasheet for **MR223458**

Polr2d (NM_027002) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Polr2d (NM_027002) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Polr2d
Synonyms: 2310002G05Rik; 2610028L19Rik; HSRBP4; RBP4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR223458 representing NM_027002
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCGGCGGGTGAAGCGATCCTCGGGCTGGCGACGTAGAAGAAGACGCTTCCCAGCTTATCTTTCCCA
AAGAGTTTGAGACAGCGGAGACTCTGCTGAACCGGAAGTCCACATGCTTCTGGAGCATCGAAAGCAGCA
GAACGAGAGCGCGGAGGACGAGCAGGAGCTGTCGGAGGTCTTCATGAAAACCTCAACTACAGGCCCGC
TTCAGCCGGTTCAAAAACAGAGAGACCATTGCCAGTGTGCGCAGCTTGCTTCTCCAGAAAAAGTTACATA
AGTTTGAGTTGGCCTGTTTAGCCAATCTTTGCCCGGAGACTGCTGAAGAGTCCAAAGCTCTGATTCCAAG
CCTGGAAGGGCGTTTTGAAGATGAGGAGCTGCAGCAGATTCTCGATGACATCCAGACGAAGCGCAGCTTC
CAGTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR223458 representing NM_027002
Red=Cloning site Green=Tags(s)
MAAGGSDPRAGDVEEDASQLIFPKFETAETLLNSEVHMLLEHRKQONESAEDEQELSEVFMKTLNYTAR
FSRFKNRETIASVRSLLQKLLHKFELACLANLCPETAEEKALIPSLEGRFEDEELQQILDDIQTKRFS
QY

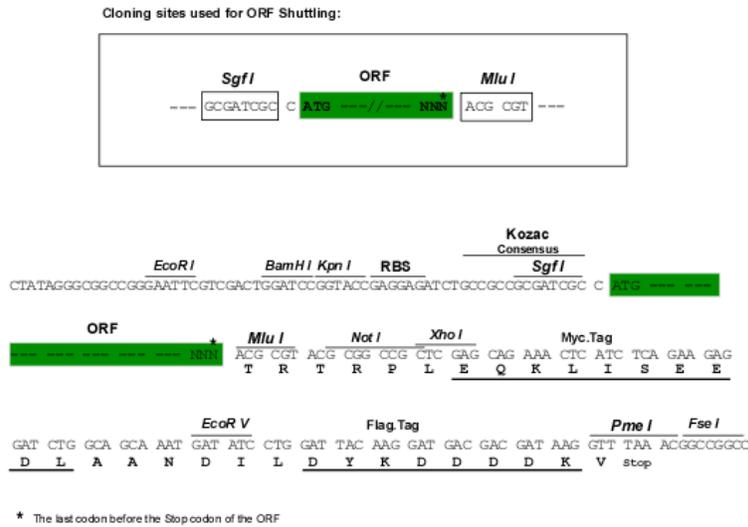
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

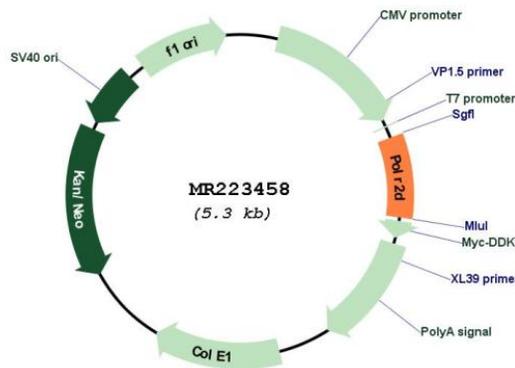


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_027002

ORF Size: 426 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:	<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_027002.4</u>
RefSeq Size:	956 bp
RefSeq ORF:	429 bp
Locus ID:	69241
UniProt ID:	<u>Q9D7M8</u>
Cytogenetics:	18 B1
MW:	16.8 kDa
Gene Summary:	DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Component of RNA polymerase II which synthesizes mRNA precursors and many functional non-coding RNAs. Pol II is the central component of the basal RNA polymerase II transcription machinery. It is composed of mobile elements that move relative to each other. RPB4 is part of a subcomplex with RPB7 that binds to a pocket formed by RPB1, RPB2 and RPB6 at the base of the clamp element. The RPB4-RPB7 subcomplex seems to lock the clamp via RPB7 in the closed conformation thus preventing double-stranded DNA to enter the active site cleft. The RPB4-RPB7 subcomplex binds single-stranded DNA and RNA (By similarity).[UniProtKB/Swiss-Prot Function]