

Product datasheet for **MG202269**

Polr2e (NM_025554) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Polr2e (NM_025554) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Polr2e
Synonyms: 25kDa; 2410021N14Rik; AW208866; RPB5; XAP4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG202269 representing NM_025554
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACGACGAGGAGGAGACCTACCGGCTGTGGAAGATCCGCAAGACGATCATGCAGCTGTGTCATGACC
 GTGGCTACCTGGTGACCCAGGATGAACTGGACCAGACACTTGAGGAATTC AAGGCCAGT TGGGGACAA
 GCCCAGCGAAGGACGGCCAAGGCCACAGACCTCACGGTGTGGTGGCCACAACGATGACCCACAGAC
 CAGATGTTTGTGTTCTTCCAGAGGAGCCCAAGGTGGGCATCAAGACCATCAAGGTATACTGCCAGCGCA
 TGCAGGAGGAAAACATCACACGGGCGCTGATTGTGGTGCAGCAGGCATGACGCCCTCCGCAAGCAGTC
 CCTGGTGGACATGGCCCCGAAGTATGTGCTGGAACAGTTTCTACAGCAGGAGCTGCTCATCAATATCACA
 GAGCACGAGCTAGTCCCTGAGCACGTGGTCATGACAAAGGAGGAGGTGACTGAACTGCTGGCTCGATACA
 AGCTTCGTGAGAGCCAGCTACCCAGAATCCAGGCCGGGACCCAGTGGCACGGTACTTTGGGATCAAGCG
 AGGGCAGGTCTGAAGATCATCCGCCAGTGAGACGGCTGGCCGCTACATCACCTACCGCTGGTGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG202269 representing NM_025554
 Red=Cloning site Green=Tags(s)

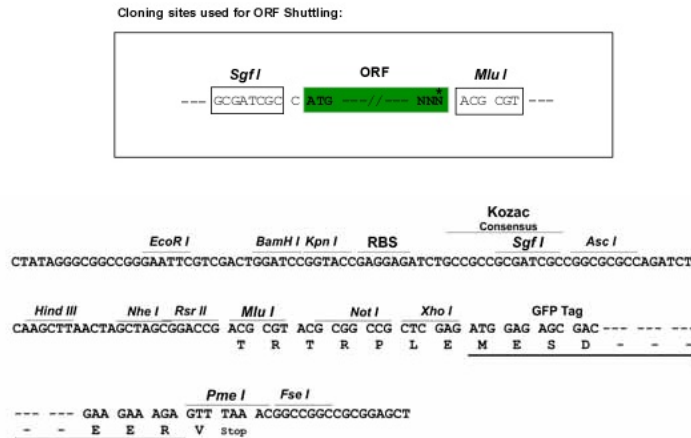
MDDEEETYRLWKIRKTIIMQLCHDRGYLVTQDELDTLEEFKAQFGDKPSEGRPRRDLTVLVAHNDPTD
 QMFVFFPEEPKVGIKTIKVVYQRMQEENITRALIVVQQGMTPSAKQSLVDMAPKYVLEQFLQPELLINIT
 EHELVPHEVVMTKEEVTELLARYKLRSQLPRIQAGDPVARYFGIKRGQVVKIIRPSETAGRYITYRLVQ

TRTRPLE - GFP Tag - V

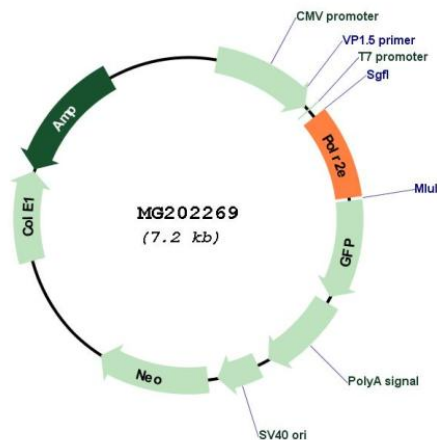
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_025554

ORF Size: 630 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.

RefSeq: [NM_025554.2](#), [NP_079830.2](#)

RefSeq Size: 1022 bp

RefSeq ORF: 633 bp

Locus ID: 66420

UniProt ID: [Q80UW8](#)

Cytogenetics: 10 C1

Gene Summary: DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Common component of RNA polymerases I, II and III which synthesize ribosomal RNA precursors, mRNA precursors and many functional non-coding RNAs, and small RNAs, such as 5S rRNA and tRNAs, respectively. Pol II is the central component of the basal RNA polymerase II transcription machinery. Pols are composed of mobile elements that move relative to each other. In Pol II, POLR2E/RPB5 is part of the lower jaw surrounding the central large cleft and thought to grab the incoming DNA template. Seems to be the major component in this process (By similarity).[UniProtKB/Swiss-Prot Function]