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Product datasheet for MG201451

Polr2g (NM_026329) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Polr2g (NM_026329) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Polr2g
Synonyms:	2410046K11Rik; A230108L04Rik; C76415; RBP7; Rpo2-7l
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG201451 representing NM_026329
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTTATCACATTTCCCTGGAGCACGAGATCCTCCTGCACCCACGATACTTCGGTCCAAACTTGCTCA
ACACGGTGAAGCAGAAGCTGTTTACCGAGGTGGAGGGGACCTGCACTGGGAAATATGGCTTTGTAATTGC
TGTCACCACCATCGACAATATTGGTGCTGGTGTGATCCAGCCAGGCCGAGGTTTTGTTCTTTATCCAGTG
AAATACAAAGCTATTGTTTTCCGGCCCTTTAAAGGTGAAGTGGTGGATGCTGTGGTCACTCAGGTCAACA
AGGTTGGACTTTTCACAGAAATTGGGCCTATGTCTTGCTTCATCTCTCGACATTCCATCCCTTCAGAGAT
GGAGTTTGATCCAAATTCAAACCCCCCTTGCTATAAGACCATGGACGAGGACATTGTGATTCAGCAGGAC
GATGAGATACGCTTGAAGATTGTAGGCACGCGTGTAGACAAGAATGACATTTTTGCCATTGGCTCTCTGA
TGGACGACTACTTGGGGCTGGTGAGC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG201451 representing NM_026329
Red=Cloning site Green=Tags(s)

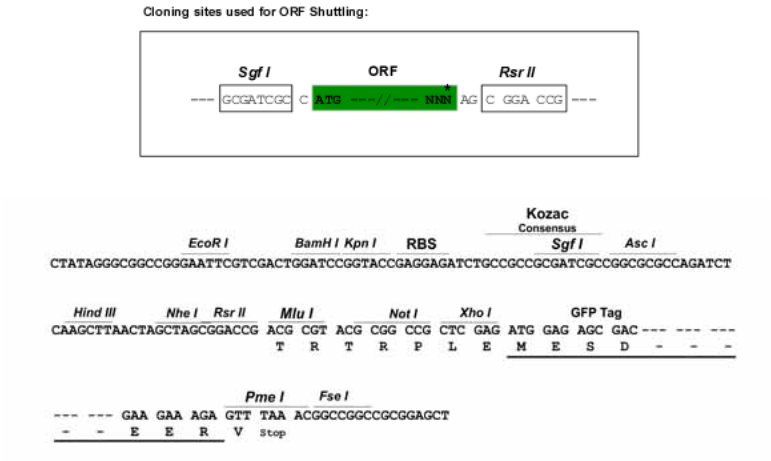
MFYHISLEHEILLHPRYFGPNLLNTVKQKLFTEVEGTCTGKYGFVIAVTTIDNIGAGVIQPGRGFVLYPV
KYKAIVFRPFKGEVVDAVVTQVNKVGLFTEIGPMSCFISRHSIPSEMEFDPNSNPPCYKTMDEDIVIQQD
DEIRLKIVGTRVDKNDIFAIGSLMDDYLGLVS

SGPTRTRRLE - GFP Tag - V

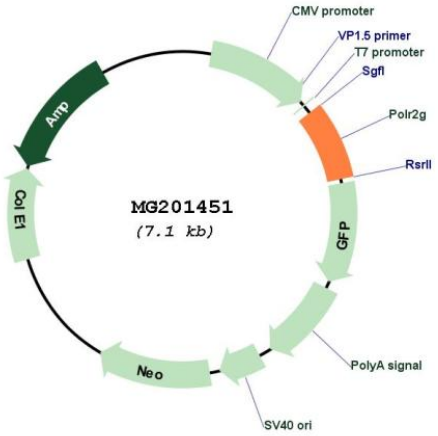
Restriction Sites: SgfI-RsrII

View online »

Cloning Scheme:



Plasmid Map:



ACCN: NM_026329

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.
RefSeq:	NM_026329.1, NP_080605.1
RefSeq Size:	869 bp
RefSeq ORF:	519 bp
Locus ID:	67710
UniProt ID:	P62488
Cytogenetics:	19 A
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. RPB7 is part of a subcomplex with RPB4 that binds to a pocket formed by RPB1, RPB2 and RPB6 at the base of the clamp element. The RBP4-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. Binds RNA (By similarity).[UniProtKB/Swiss-Prot Function]