

Product datasheet for **MG218709**

Polr3c (NM_028925) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Polr3c (NM_028925) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Polr3c
Synonyms:	4933407E01Rik; RPC3; RPC62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG218709 representing NM_028925
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGACTCAAGCAGAGATTAACTGTGTTCTTTGTGCTGCAAGAGCATTTTGGTGAGATTGTAGAAAAA
 TTGGAGTCCACCTAGTCAGAACTGGAAGCCAGCCACTTAGAGTAATTGCCACGACACAAAAGCATCCCT
 GGACCAGGTGAAAAAGCCCTTTGTGTCCTCATTCACCACAACCTGGTCCTCTATCATGTGCACAAGCGC
 GGTGTGGTGGAGTATGAAGCCAGTGCAGCCGGTACTGAGGATGCTTAGGTATCCCGGTACATCTACA
 CCACAAAACGCTGTACGGTGACACCGGAGAGCTGATTGTTGAGGAGCTCCTGCTGAATGGCAAAATGAC
 AATGTCAGCTGTTGTGAAGAAAGTAGCCGACCGACTCACAGAGACCATGGAGGATGGCAAGACCATGGAC
 TACGCTGAGGTATCAATGCATTTGTGCGACTGGCAGATACTCACTTTGTACAGCGCTGTCCCTGGTTC
 CTGACACTGACAGTTCTGACCGTGGGCCACCGCCACCCGCCCAACCCTTGTCTTAATGAAAAGGACAT
 GTACCTAGTTCCAAAAGTGAAGTGTGATAGGAAAAGGTAAAGAGGAGGATCATCTGATGAAGATGCTACT
 GGAGAGCCCAAGGCCAAGAAACCAAGATACACAGATAACAAGGAGCCCTCACCAGACGATGGGATTATT
 GGCAAGTCAACCTCGACAGGTTCCACCAGCACTTCCGTGACCAAGCAATCGTGAGCGCAGTGGAACCG
 AATGGACCAGACAAGCAGCGAGATCGTGCGGACGATGCTCCGGATGAGTGAGATCACCCTCCCTTAGC
 GCCCCCTATACTCAGCCGCTGTCTCCAATGAGATCTTCAGGTCCTGCCGTCGGATATAACATCTCTA
 AACAGGTTCTCGATCAGTACCTCACGCTGCTGGCAGATGACCCACTAGAGTTTATTGGAAAGTCTGGCGA
 CAGTGGCGGAGGAATGTTTGTATCAACCTCCATAAAGCATTAGCGTCCCTAGCCACTGCAACTCTGGAG
 TCTGTCTCCAGGAGAGATTCGGGTCTCGCTGTGCCAGGATATTCGTCTGGTATTGCAGAAGAAACACC
 TTGAGCAGAAGCAGGTGGAGGACTTTGCAATGATCCCTGCGAAGGAGGCAAGGACATGCTGTACAAGAT
 GCTCTCGGAAAACCTTCATCTGCTGCAGGAAATTCCTAAGACGCCAGACCACGCCCGTCCAGGACCTTC
 TATCTGTACACTGTGAATGTGCTCTCAGCTGCCAGGATGCTGTTGCACAGGTGCTATAAGAGCATAGCCA
 ACTTGATAGAACGGCGACAGTTTGAACAAAGGAGAACAAGCGGCTACTAGAAAAGTCTCAGCGGTGGA
 AGCCATCATGGCATCCATGCAGGCCACGGGTGCAGAGGAGGTGCAGCTGCAGGAGATAGAGGAGATGATC
 ACAGCCCCCGAGCGGCAGCAGCTGGAGACACTGAAACGCAACGTTAACAAGTTGGACGCCAGTGAGATCC
 AGGTGGATGAAACCATCTTCTTACTGGAATCATACATTGAGAGCACCATGAAGAGGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG218709 representing NM_028925
 Red=Cloning site Green=Tags(s)

MTQAEIKLCSLLQEHFGEIVEKIGVHLVRTGSQPLRVIAHDTKASLDQVKKALCVLIHNLVLVYVHKR
 GVVEYEAQCSRVLRLRYPRYIYTTKTLVYDGTGELIVEELLNGKMTMSAVVKKVADRLTETMEDGKTMD
 YAEVSNFVRLADTHFVQRCPLVPDTSDDRGPPTLVINEKDMYLVPKLSLIGKRRRSSDEDAT
 GEPKAKKPRYTDNKEPSPDDGIYWQVNLDRFHQHFQDQAIVSANRMDQTSSEIVRTMLRMSEITTPSS
 APYTQPLSSNEIFRSLPVGYNISKQVLQYLTLADDPLEFIGKSGDGGGMFVINLHKALASLATATLE
 SVIQRERFSRCARIFRLVLQKKHLEQKQVEDFAMIPAKEAKDMLYKMLSENFILLQEIPKTPDHAPSRTF
 YLYTVNVLSAARMLLHRCYKSIALNIERRQFETKENKRLLEKSQRVEAIMASMQATGAEEVQLQEIEEMI
 TAPERQQLKRNVNKLDASEIQVDEIFLLESYIESTMKRQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_028925

ORF Size: 1599 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_028925.1](#), [NP_083201.1](#)

RefSeq Size: 1796 bp

RefSeq ORF: 1602 bp

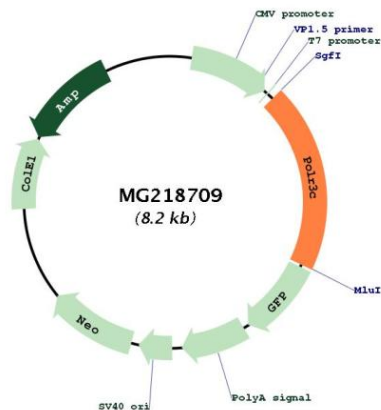
Locus ID: 74414

UniProt ID: [Q9D483](#)

Cytogenetics: 3 F2.1

Gene Summary: DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific core component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. May direct with other members of the subcomplex RNA Pol III binding to the TFIIB-DNA complex via the interactions between TFIIB and POLR3F. May be involved either in the recruitment and stabilization of the subcomplex within RNA polymerase III, or in stimulating catalytic functions of other subunits during initiation. Plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase III transcripts induce type I interferon and NF-Kappa-B through the RIG-I pathway. Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG218709