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Product datasheet for MR218709

Polr3c (NM_028925) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Polr3c (NM_028925) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Polr3c
Synonyms:	4933407E01Rik; RPC3; RPC62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR218709 representing NM_028925
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTCAAGCAGAGATTAAACTGTGTTCTTTGTTGCTGCAAGAGCATTTTGGTGAGATTGTAGAAAAAA
TTGGAGTCCACCTAGTCAGAACTGGAAGCCAGCCACTTAGAGTAATTGCCCACGACACAAAAGCATCCCT
GGACCAGGTGAAAAAAGCCCTTTGTGTCCTCATTCACCACAACCTGGTCCTCTATCATGTGCACAAGCGC
GGTGTGGTGGAGTATGAAGCCCAGTGCAGCCGGGTACTGAGGATGCTTAGGTATCCCCGGTACATCTACA
CCACCAAAACGCTGTACGGTGACACCGGAGAGCTGATTGTTGAGGAGCTCCTGCTGAATGGCAAAATGAC
AATGTCAGCTGTTGTGAAGAAAGTAGCCGACCGACTCACAGAGACCATGGAGGATGGCAAGACCATGGAC
TACGCTGAGGTATCAAATGCATTTGTGCGACTGGCAGATACTCACTTTGTACAGCGCTGTCCCCTGGTTC
CTGACACTGACAGTTCTGACCGTGGGCCACCGCCACCCGCCCCAACCCTTGTCATTAATGAAAAGGACAT
GTACCTAGTTCCCAAACTGAGCTTGATAGGAAAAGGTAAGAGGAGGAGATCATCTGATGAAGATGCTACT
GGAGAGCCCAAGGCCAAGAAACCAAGATACACAGATAACAAGGAGCCCTCACCAGACGATGGGATTTATT
GGCAAGTCAACCTCGACAGGTTCCACCAGCACTTCCGTGACCAAGCAATCGTGAGCGCAGTGGCAAACCG
AATGGACCAGACAAGCAGCGAGATCGTGCGGACGATGCTCCGGATGAGTGAGATCACCACTCCCTCTAGC
GCCCCCTATACTCAGCCGCTGTCCTCCAATGAGATCTTCAGGTCCCTGCCCGTCGGATATAACATCTCTA
AACAGGTTCTCGATCAGTACCTCACGCTGCTGGCAGATGACCCACTAGAGTTTATTGGAAAGTCTGGCGA
CAGTGGCGGAGGAATGTTTGTCATCAACCTCCATAAAGCATTAGCGTCCCTAGCCACTGCAACTCTGGAG
TCTGTCATCCAGGAGAGATTCGGGTCTCGCTGTGCCAGGATATTCCGTCTGGTATTGCAGAAGAAACACC
TTGAGCAGAAGCAGGTGGAGGACTTTGCAATGATCCCTGCGAAGGAGGCAAAGGACATGCTGTACAAGAT
GCTCTCGGAAAACTTCATCCTGCTGCAGGAAATTCCTAAGACGCCAGACCACGCCCCGTCCAGGACCTTC
TATCTGTACACTGTGAATGTGCTCTCAGCTGCCAGGATGCTGTTGCACAGGTGCTATAAGAGCATAGCCA
ACTTGATAGAACGGCGACAGTTTGAAACAAAGGAGAACAAGCGGCTACTAGAAAAGTCTCAGCGGGTGGA
AGCCATCATGGCATCCATGCAGGCCACGGGTGCAGAGGAGGTGCAGCTGCAGGAGATAGAGGAGATGATC
ACAGCCCCCGAGCGGCAGCAGCTGGAGACACTGAAACGCAACGTTAACAAGTTGGACGCCAGTGAGATCC
AGGTGGATGAAACCATCTTCTTACTGGAATCATACATTGAGAGCACCATGAAGAGGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218709 representing NM_028925
Red=Cloning site Green=Tags(s)

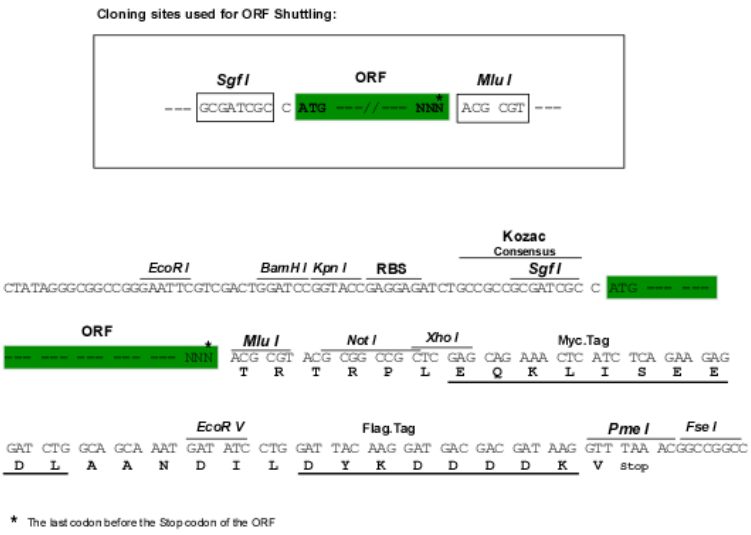
MTQAEIKLCSLLLQEHFGEIVEKIGVHLVRTGSQPLRVIAHDTKASLDQVKKALCVLIHHNLVLYHVHKR
GVVEYEAQCSRVLRMLRYPRYIYTTKTLYGDTGELIVEELLLNGKMTMSAVVKKVADRLTETMEDGKTMD
YAEVSNAFVRLADTHFVQRCPLVPDTDSSDRGPPPPAPTLVINEKDMYLVPKLSLIGKGKRRRSSDEDAT
GEPKAKKPRYTDNKEPSPDDGIYWQVNLDRFHQHFRDQAIVSAVANRMDQTSSEIVRTMLRMSEITTPSS
APYTQPLSSNEIFRSLPVGYNISKQVLDQYLTLLADDPLEFIGKSGDSGGGMFVINLHKALASLATATLE
SVIQERFGSRCARIFRLVLQKKHLEQKQVEDFAMIPAKEAKDMLYKMLSENFILLQEIPKTPDHAPSRTF
YLYTVNVLSAARMLLHRCYKSIANLIERRQFETKENKRLLEKSQRVEAIMASMQATGAEEVQLQEIEEMI
TAPERQQLETLKRNVNKLDASEIQVDETIFLLESYIESTMKRQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9044_f05.zip

Restriction Sites: SgfI-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.

RefSeq: NM_028925.1, NP_083201.1

RefSeq Size: 1796 bp

RefSeq ORF: 1602 bp

Locus ID: 74414

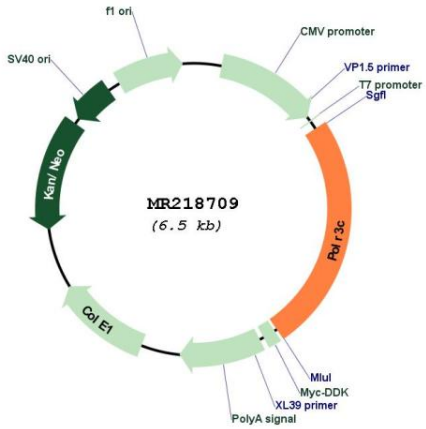
UniProt ID: Q9D483

Cytogenetics: 3 F2.1

MW: 61.2 kDa

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 TFIIIB-DNA complex via the interactions between TFIIIB 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 MR218709