

Product datasheet for **MR222511**

Ripk3 (NM_019955) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ripk3 (NM_019955) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ripk3
Synonyms:	2610528K09Rik; AW107945; Rip3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222511 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTTCTGTCAAGTTATGGCCTACTGGTGCCTCAGCGGTTCTCTGGTGAAGAACTGAAGA
 AGCTGGAGTTTGTGGTAAAGGAGGTTTCGGAGTCGTGTTCCGGGCACACCACAGAACATGGAACCATGA
 TGTAGCAGTCAAGATCGTGAACCGAAGAAGATATCCTGGGAGGTGAAGGCTATGGTAACTCTCGTAAT
 GAGAACGTTCTGCTCCTGCTGGGGTCACTGAGGACCTCCAGTGGGACTTCGTGTCCGGGCAGGCTCTGG
 TGACAAGATTCATGGAGAATGGCTCCCTCGCAGGGCTGCTGCAACCCGAGTGCCCTCGGCCCTGGCCACT
 CCTCTGTCGCTGCTGCAGGAAGTGGTCTGGGATGTGCTACCTACACAGCTTGAACCCCTCGCTCCTG
 CACCGGGACCTCAAGCCCTAACATTCTGCTGGATCCAGAGCTCCACGCCAAGCTAGCAGATTTGGCC
 TGTCACGTTTCAGGGAGGTCCAGTCAGGGTCAGGATCAGGATCAGGATCCAGGGACTCTGGGGCAC
 CCTAGCCTACTTGACCCAGAGCTGTTATTTGATGTCAACCTGAAGGCTTCTAAAGCGAGTGATGTCTAC
 AGCTTTGGGATCCTCGTGTGGGAGTGGCTGGCAGAGAAGCTGAGTTGGTAGACAAGACTTCACTAA
 TCCGGGAAACAGTGTGTGACAGGCAGAGTCGCTCCTCCACTGACAGAGCTGCCCTCCAGGTAGCCCTGAGAC
 TCCCGGCTTGAAAAACTGAAGGAGTTAATGATTCATTGCTGGGTTCCAGTCCGAAAACAGGCCATCC
 TTCCAGGACTGCGAACCAAAAACCAATGAAGTTTACAATCTGGTAAAGGACAAGGTAGATGCTGCTGCT
 CCGAGGTAAGCATTATCTGTCTCAGCACAGAAGCAGCGGCAGAAAACCTGTCTGCCAGAGAGCCAAGCCA
 AAGAGGCACAGAAATGGATTGCCGAGGGAAACCATGGTTTCTAAAATGCTGGACCGCTGCATTTGGAG
 GAACCCCTCCGACCAGTTCCTGGAAAATGCTCTGAGAGGCAAGCACAGGACACATCAGTTGGGCCTGCCA
 CACCAAGGACATCTTCTGACCCCGTGGCTGGCACTCCTCAGATTCCACATACTTTACCTTCCAGGAG
 CACAACACCTGGGCCAGTCTTACTGAGACTCCCGGTCCTCACCCCAAAGGAATCAGGGAGATGGAAGA
 CACGGCACTCCTTGGTATCCCTGACCCACCGAATCCAATGACAGGGCCACCGGCTCTGCTCTCAACA
 ACTGTTCTGAAGTGCAGATTGGGAACTACAACCTCTTGGTAGCACCACCAAGAACTACTGCCTCAAGTTC
 GGCCAAGTATGACCAAGCACAGTTCGGCAGGGGTAGGGGCTGGCAGCCCTCCACAAG

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222511 protein sequence
 Red=Cloning site Green=Tags(s)

MSSVKLWPTGASAVPLVSREELKKLEFVGKGGFVVFRAHRTWNHDVAVKIVNSKKISWEVKAMVNLRN
 ENVLLLLGVTEDLQWDFVSGQALVTRFMENGLAGLLQPECPRPWPLLCRLLQEVVLGMCYLHSLNPPLL
 HRDLKPSNILLDPELHAKLADFGLSTFQGGSSGSGSGSRDSSGTLAYLDPELLFDVNLKASKASDVY
 SFGILVWAVLAGREAELVDKTSLIRETVCDRQSRPPLTELPSPETPGLEKELKELMIHCWGSQSENRRS
 FQDCEPKTNEVYNLVKDKVDAAVSEVKHYLSQHRSSGRNLSAREPSQRGTEMDCPRETMVSKMLDRLHLE
 EPSGPVPGKCPERQAQDTSVGPATPARTSSDPVAGTPQIPHTLPFRGTTGPVFTETPGPHQQRNQGDGR
 HGTPWPWPPTPNPMTGPPALVFNNCSEVQIGNYNSLVAPPRTTASSSAKYDQAQFGRGRGWQPFHK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_019955

ORF Size: 1458 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

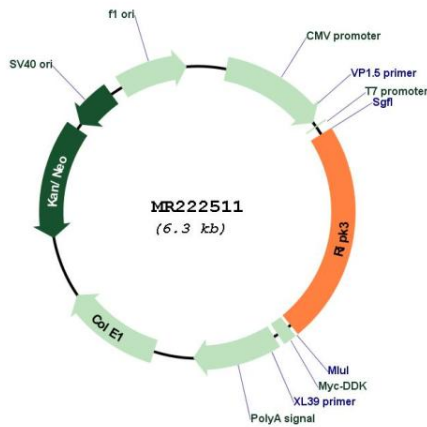
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_019955.2, NP_064339.2](#)
RefSeq Size: 1899 bp
RefSeq ORF: 1461 bp
Locus ID: 56532
UniProt ID: [Q9QZL0](#)
Cytogenetics: 14 C3
MW: 53.3 kDa

Gene Summary: Essential for necroptosis, a programmed cell death process in response to death-inducing TNF-alpha family members. Upon induction of necrosis, RIPK3 interacts with, and phosphorylates RIPK1 and MLKL to form a necrosis-inducing complex. RIPK3 binds to and enhances the activity of three metabolic enzymes: GLUL, GLUD1, and PYGL. These metabolic enzymes may eventually stimulate the tricarboxylic acid cycle and oxidative phosphorylation, which could result in enhanced ROS production.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222511