

## Product datasheet for **MR208314**

### **Riok3 (NM\_024182) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Riok3 (NM_024182) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Riok3
Synonyms:	1200013N13Rik; D18Ertd331e; E130306C24Rik; Sudd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208314 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGATCTGGTCGGAGTGTCTTCGCTGAGCCAGGGCCCGCAGCAGCTTGGGGACCCAGTAAAGTCCCAT  
 GGGCTACCCCTCAAACACAGTATCCTGTTCACTGACCGAGGTGATGAGTGAGGAGCTGGCTAAAGAGCT  
 GCAGTTGGAAGAAGAAGCGGCTGCTTCCCTGAAGTTGTTGTTGCTGAAGGACCATTCTTTCTGGAGAA  
 AACATTGACACTTCCAGTGACCTAATGCTGGCTCAGATGCTACAGATGGAATTTGACAGAGAATATGATG  
 CACAGCTTAGGCGTGAGGAAAAGAAGTTCAATGGTGATAGCAAAGTTTCCATTTGTTGAAAACACTATCG  
 CAAAGTTCATCCTTTGAAGACAGTGACAGCTCTGAAGACGAGGTTGACTGGCAGGACACTCGAGACGAT  
 CCCTACAGACCAGCAAAGCCAATTCCTACTCCAAAAAGGGTTTTATTGGAAAAGGAAAAGACATCACCA  
 CCAAGCATGATGAAGTAGTATGTGGAAGAAGAACACAGCAAGAATGGAAAATTTGCCCTGGCTTTCA  
 GGTAGGGGATGGAATTGGAATGGATTTGAAACTATCCAACCACGTTTTTAAATGCCTTAAAAACAACAGCC  
 TACTCAGAAGAGCGTCGGAGCGCCGCTCCACGAGAAGAAGGAACATTCTACCGCTGAAAAAGCAGTTG  
 ATCCTAAGACACGCTTACTTATGTATAAAATGGTCAACTCTGGAATGTTGGAGACAACTACTGGCTGTAT  
 TAGTACAGGAAAGGAATCTGTTGTCTTTCATGCATATGGAGGGAGCCTGGAGGATGAAAAGGAAGATGGT  
 AAGGCTATACCAACAGAAATGTGCCATCAAGGATTTTAAAAACAACCCTTAATGAGTTTAAAGATCGTGACA  
 AGTACATTAAGATGATTTTCAGGTTTAAAGATCGCTTCAGTAACTAAATCCACGTAAGATCATCCGCAT  
 GTGGGCAGAGAAAAGAAATGCACAATCTTACAAGAATGCAGAAGGCTGGAATTCCTGTCCAACAGTTGTA  
 CTGCTTAAAGAAGCACATTTTAGTTATGTCTTTCATTGGCCATGATCAAGTCCAGCCCCTAAATTTAAAG  
 AAGTAAAGCTTAGTAATGAAGAAATGAAAGATGCCTACTATCAGACTCTTCATTTGATGCAGCAATTATA  
 TAACGAATGTACCCTTGTGCATGCTGACCTCAGCGAGTATAACATGTTGTGGCATGCTGGGAAGGCTGG  
 TTGATTGACGTCAGTCAGTCGGTAGAGCCAACCCATCCTCATGGCCTGGAGTTCTTATTCGTGACTGTA  
 GGAATGTTTCACAGTTCTTCCAGAAAGGAGGAGTAACGGAAGCCCTCAATGAACGGGAGCTGTTCAATGC  
 TGTTTCTGGCCTGAACATCTCGGCAGACAATGAAGCTGATTTCTAGCTGAGATAGAAGCTTTGGAGAAG  
 ATGAATGAAGATCACGTTTCAAGAAGCGGAGGAAAGCAGCCTCGTTTCTGAAAGATGATGGAAGCCAC  
 CTGTGCTGTCTGCCGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208314 protein sequence  
 Red=Cloning site Green=Tags(s)

MDLVGVSSPEPGPAAAWGPSKCPWATPQNTVSCSLTEVMSEELAKELQLEEEAAAFPEVVVAEGPFISGE  
 NIDTSSDLMLAQMLQMEFDREYDAQLRREEKFNKGDGSKVSI SFENYRKVHPFEDSDSEDEVDWQDTRDD  
 PYRPAKPIPTPKKGF IGKGDITTKHDEVVCGRKNARMENFAPGFQVGDGIGMDLKL SNHVFNALKQHA  
 YSEERRSARLHEKKEHSTAEKAVDPKTRLLMYKMVNSGMLEITITGCISTGKESVVFHAYGGSLEDEKEDG  
 KAIPTECAIKVFKTTLNEFKNRDKYIKDDFRFKDRFSKLNPRKIRMWAEKEMHNLTRMQKAGIPCTVV  
 LLKKHILVMSF IGHDQVPAPKLKEVKLSNEEMKDAYYQTLHLMQQLYNECTLVHADLSEYNMLWHAGKVV  
 LIDVSQSVEPTPHGLEFLFRDCRNVSQFFQKGGVTEALNERELFNAVSGLNI SADNEADFLAEIEALEK  
 MNEDHVQKNGRKAASFLKDDGSPVLSAD

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_024182

**ORF Size:** 1560 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\\_024182.1](#), [NM\\_024182.2](#), [NM\\_024182.3](#), [NM\\_024182.4](#), [NP\\_077144.2](#)

**RefSeq Size:** 3661 bp

**RefSeq ORF:** 1560 bp

**Locus ID:** 66878

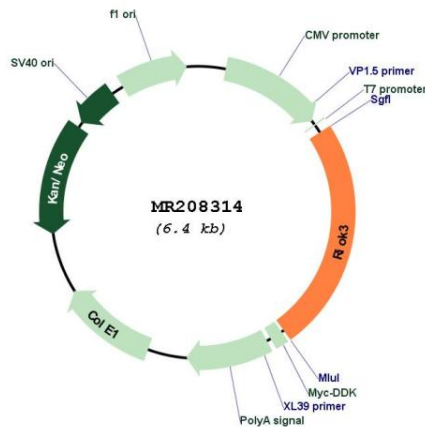
**UniProt ID:** [Q9DBU3](#)

**Cytogenetics:** 18 6.15 cM

**MW:** 58.7 kDa

**Gene Summary:** Involved in regulation of type I interferon (IFN)-dependent immune response which plays a critical role in the innate immune response against DNA and RNA viruses. May act as an adapter protein essential for the recruitment of TBK1 to IRF3. Phosphorylates IFIH1 on 'Ser-828' interfering with IFIH1 filament assembly on long dsRNA and resulting in attenuated IFIH1-signaling. Can inhibit CASP10 isoform 7-mediated activation of the NF-kappaB signaling pathway. May play a role in the biogenesis of the 40S ribosomal subunit. Involved in the processing of 21S pre-rRNA to the mature 18S rRNA.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208314