

## Product datasheet for MR205564

### Rsad2 (NM\_021384) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rsad2 (NM_021384) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rsad2
Synonyms:	2510004L01Rik; cig5; Vig1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205564 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGATGCTGGTGCCCACTGCTCTAGCTGCTCGGCTGCTGAGCCTGTTCCAGCAGCAGCTGGTTCCC  
TCTGGAGTGGCCTGGCCATCCTGTTCTGCTGGCTGAGAATAGCATTAGGGTGGCTAGATCCCGGGAAGGA  
ACAGCCACAGGTCCGGGTGAGCTGGAGGAGCCAGGAGACCCAGGAAGATGGGAACAGCACTCAGCGC  
ACAACCCCGTGAGTGTCACTACCACTCACTCGTCAGTCACTACAAATGTGGCTTCTGCTTCCACA  
CAGCCAAGACATCCTTCGTGCTGCCCTGGAGGAGCCAAGCGAGGACTGCTTCTGCTCAAACAGGCTGG  
TTTGGAGAAGATCAACTTTCTGGAGGAGAACCCTTCCTTCAGGACAGGGTGAATACTTGGCAAGCTT  
GTGAGATTCTGCAAGGAGGAGCTAGCCCTGCCCTCTGTGAGCATAGTGAGCAATGGCAGCCTTATCCGGG  
AGAGATGGTTCAAGGACTATGGGAGTATTTGGACATTCTTGCTATCTCCTGCGACAGCTTCGATGAGCA  
GGTTAATGCTCTGATTGGCCGTGGTCAAGGAAAAAAGAACACCGTGAAAAACCTTCAAAGCTGAGGAGG  
TGGTGCAGGGATTACAAGGTGGCTTTCAAGATCACTCTGTCAATCGCTTCAACGTGGACGAAGACA  
TGAATGAACACATCAAGGCCCTGAGCCCTGTGCGCTGGAAGGTTTTCCAGTGCCTCCTAATTGAGGGTGA  
GAATCAGGAGAAGATGCCCTGAGGGAAGCAGAAAGATTTCTTATAAGCAATGAAGAATTTGAAACATTC  
TTGGACGTCACAAAGAGGTGTCTGTTTGGTGCCTGAATCAACCAGAAGATGAAGACCTCTACCTTA  
TCCTAGATGAATATATGCGCTTCTGAACTGTACCGGTGGCCGGAAGGACCCTTCCAAGTCTATTCTGGA  
TGTTGGCGTGGAAGAAGCAATAAAGTTCAAGTGGATTTGATGAGAAGATGTTTCTGAAGCGTGGCGGAAAG  
TATGTGTGGAGTAAAGCTGACCTGAAGCTGGACTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205564 protein sequence  
Red=Cloning site Green=Tags(s)

MGMLVPTALAARLLSLFQQQLGSLWGLAIFCWLRIALGWLDPGKEQPQVRGELEETQETQEDGNSTQR  
 TTPVSVNYHFTRQCNYKCGFCFHTAKTSFVLPLEEAKRGLLLKQAGLEKINFSGGEPFLQDRGEYLGKL  
 VRFCKEELALPSVSIIVNSGLIRERWFKDYGEYLDILAISCDSDFEQVNALIGRGQGKKNHVENLQKLRR  
 WCRDYKVAFKINSVINRFNVDEDMNEHIKALSPVRWKFQCLLIEGENSGEDALREAERFLISNEEFETF  
 LERHKVSVCLVPESNQMKDSYLILDEYMRFLNCTGGRKDPKSKSILDVGVVEEAIKFSGFDEKMFLKRGGK  
 YWWSKADLKLDW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_021384

**ORF Size:** 1089 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\\_021384.1](#), [NM\\_021384.2](#), [NM\\_021384.3](#), [NM\\_021384.4](#), [NP\\_067359.2](#)

**RefSeq Size:** 3785 bp

**RefSeq ORF:** 1089 bp

**Locus ID:** 58185

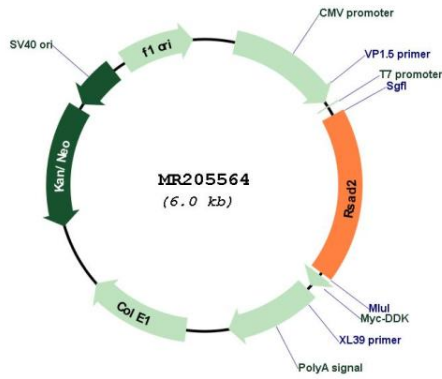
**UniProt ID:** [Q8CBB9](#)

**Cytogenetics:** 12 A2

**MW:** 41.6 kDa

**Gene Summary:** Interferon-inducible iron-sulfur (4FE-4S) cluster-binding antiviral protein which plays a major role in the cell antiviral state induced by type I and type II interferon. Can inhibit a wide range of viruses, including west Nile virus (WNV), dengue virus, sindbis virus, influenza A virus, sendai virus and vesicular stomatitis virus (VSV). Displays antiviral activity against influenza A virus by inhibiting the budding of the virus from the plasma membrane by disturbing the lipid rafts. This is accomplished, at least in part, through binding and inhibition of the enzyme farnesyl diphosphate synthase (FPPS), which is essential for the biosynthesis of isoprenoid-derived lipids. Promotes TLR7 and TLR9-dependent production of IFN-beta production in plasmacytoid dendritic cells (pDCs) by facilitating Lys-63<sup>l</sup>-linked ubiquitination of IRAK1. Plays a role in CD4<sup>+</sup> T-cells activation and differentiation. Facilitates T-cell receptor (TCR)-mediated GATA3 activation and optimal T-helper 2 (Th2) cytokine production by modulating NFKB1 and JUNB activities. Can inhibit secretion of soluble proteins.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205564