

Product datasheet for **MR209944**

Zc3hav1 (BC029090) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Zc3hav1 (BC029090) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Zc3hav1
Synonyms:	1200014N16, 2900058M19, ZAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR209944 representing BC029090
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGGATCCCAGGTATTCTGTTTCATACCAAGATCCTGTGCGCTCACGGGGCCGCATGACCCTGG
AGGAACTGCTGGGTGAGATCAGCCTCCCGAAGCGCAACTCTACGAGCTGCTGAAGGCAGCGGGCCCGA
TCGCTTTGTGCTATTGGAGACTGGAGACCAGCCGGGATCACTCGGTCCGGTGGTCTACTACTCGAGCC
CGCGTCTGCCGTCGAACTACTGCCAGAGACCCTGCGACAGCCTGCACCTTTGCAAGCTTAATCTGCTCG
GCCGGTGCCACTATGCACAGTCCAGCGGAACCTCTGCAAATATTCTCACGATGTTCTCTCGAACAGAA
CTTCCAGTCTGAAGAATCATGAGCTCTCCGGGCTTAACCAAGAGGAGCTGGCGGTCTCTGTTCCAA
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TCTCAGGTCTATAACCTGATGGACAGGAAGTGTGGCCATCATGAGGGAGCATGGGCTGAGTTCTGAC
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TCTAGAGGTTCTCTAACGGTCTCACCTCTGGGTCTGGTCCCCCTAGCCAGATGTACCAGGCTGTAAG
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GACACCAGTCGAGGTCAAGGGCAAGAACAAGGACATTGATCGCGTCCCGTTTTTAAATAGTTATATTGA
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CATCTGTACAGGGGCTGTCAGCAGGTCAACTGCAACAAGAACCACTTCCATCTGCCCTACCGGTGGCAGC
TGTTTCATATTGCCACTTGGATGGACTTTCAGGACATGGAGTATATCGAGCGGGCCTATTGTGATCCCCA
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CAGAATTACGAGTTAAGCTTTCAAGGGATGATTGAGACGAATATAGCTTCCAAGACTCAAAGGCATGTTG
TGAGAAGGCCAGTTTTTGTCTTTCGAAGGATGTGGAGCAGAAGAGAAGAGGTCCAGAG

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209944 representing BC029090
Red=Cloning site Green=Tags(s)

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MTDPEVFCFITKILCAHGGRTLEELLGEISLPEAQLYELKAAGPDRFVLEETGDQAGITRSVVATTRA
RVCRRKYCQRPCDSLHLCKLNLGRCHYAQSQRNLCKYSHDVLSEQNFQVLKNHLSGLNQEELAVLLVQ
SDPFFMPEICKSYKGEGRKQICGQPQPCERLHICEHFTRGNCSYLNCLRSHNLMRDKVLAIMREHGLSSD
VVQNIQDICNNKHTRRNPPSMRAPHHRGGGAHRDRSKSRDRFHHSLEVLSTVSPLGSGPPSPDVTGCK
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AAGFPLVAAQRNEAGAMKMGMPSGHHVEVKGNKIDIRVPFLNSYIDGVTMEEATVSGILGKRATDNGLE
EMILSSNHQKSVAKTQDPQTGRITDSDGQDTAFLHSKYEENPAWPDSLCYIVNPVSPRMDHGLKEICLD
HLRYGCQQVNCNKNHFLPYRWQLFILPTWDMFDQMEYIERAYCDPQIEIIVIEKHRINFKMTCDSYPI
RRLSTPSFVEKTLNSVFTTKWLWYWRNELNEYTQYGHESPGHTSSEINSAYLESFFHSCPRGVLQFHAGS
QNYELSFQGMQIQTNIASKTQRHVVRPVPVSSKDVEQKRRGPE
    
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: BC029090

ORF Size: 2019 bp

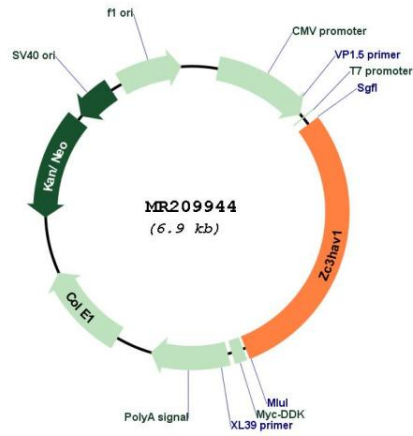
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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:	<u>BC029090</u> , <u>AAH29090</u>
RefSeq Size:	2980 bp
RefSeq ORF:	2021 bp
Locus ID:	78781
Cytogenetics:	6 17.72 cM
MW:	109.2 kDa
Gene Summary:	<p>Antiviral protein which inhibits the replication of viruses by recruiting the cellular RNA degradation machineries to degrade the viral mRNAs. Binds to a ZAP-responsive element (ZRE) present in the target viral mRNA, recruits cellular poly(A)-specific ribonuclease PARN to remove the poly(A) tail, and the 3'-5' exoribonuclease complex exosome to degrade the RNA body from the 3'-end. It also recruits the decapping complex DCP1-DCP2 through RNA helicase p72 (DDX17) to remove the cap structure of the viral mRNA to initiate its degradation from the 5'-end. Its target viruses belong to families which include retroviridae: human immunodeficiency virus type 1 (HIV-1) and moloney and murine leukemia virus (MoMLV), filoviridae: ebola virus (EBOV) and marburg virus (MARV), togaviridae: sindbis virus (SINV) and Ross river virus (RRV). Specifically targets the multiply spliced but not unspliced or singly spliced HIV-1 mRNAs for degradation. Isoform 1 is a more potent viral inhibitor than isoform 2. Isoform 2 acts as a positive regulator of DDX58/RIG-I signaling resulting in activation of the downstream effector IRF3 leading to the expression of type I IFNs and IFN stimulated genes (ISGs).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR209944