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Product datasheet for MC220698

Zc3hav1 (BC029090) Mouse Untagged Clone

Product data:

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

Fully Sequenced ORF:

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGGATCCCGAGGTATTCTGTTTCATCACCAAGATCCTGTGCGCTCACGGGGGCCGCATGACCCTGG
AGGAACTGCTGGGTGAGATCAGCCTCCCCGAAGCGCAACTCTACGAGCTGCTGAAGGCAGCGGGGCCCGA
TCGCTTTGTGCTATTGGAGACTGGAGACCAGGCCGGGATCACTCGGTCGGTGGTGGCTACTACTCGAGCC
CGCGTCTGCCGTCGCAAGTACTGCCAGAGACCCTGCGACAGCCTGCACCTTTGCAAGCTTAATCTGCTCG
GCCGGTGCCACTATGCACAGTCCCAGCGGAACCTCTGCAAATATTCTCACGATGTTCTCTCGGAACAGAA
CTTCCAGGTCCTGAAGAATCATGAGCTCTCCGGGCTTAACCAAGAGGAGCTGGCGGTCCTCCTGGTCCAA
AGCGACCCTTTCTTCATGCCTGAGATATGCAAGAGTTACAAAGGAGAGGGCCGCAAACAGATCTGCGGGC
AGCCGCAGCCCTGCGAGAGACTCCACATCTGTGAGCACTTCACCCGGGGCAACTGCAGTTACCTCAACTG
TCTCAGGTCTCATAACCTGATGGACAGGAAGGTGTTGGCCATCATGAGGGAGCATGGGCTGAGTTCTGAC
GTGGTCCAGAACATCCAGGACATCTGTAACAACAAACACACTCGGAGGAACCCCCCTAGCATGAGAGCTC
CCCACCCACATCGCAGAGGCGGGGCACACAGGGACAGAAGCAAAAGCAGAGACCGCTTCCATCACAACAG
TCTAGAGGTTCTCTCAACGGTCTCACCTCTGGGGTCTGGTCCCCCTAGCCCAGATGTCACCGGCTGTAAG
GATCCCCTGGAGGATGTGTCTGCAGATGTCACCCAGAAGTTCAAGTACCTGGGGACTCAGGACCGTGCAC
AGCTTTCCTCCGTCTCATCTAAGGCCGCTGGTGTCCGAGGACCCAGTCAAATGAGAGCAAGCCAGGAGTT
TTTGGAGGATGGGGATCCAGATGGCTTGTTTTCTAGGAATCGTTCTGATTCGTCCACAAGTCGAACCTCT
GCTGCTGGCTTTCCTCTCGTTGCGGCACAAAGAAATGAAGCTGGGGCCATGAAAATGGGCATGCCTTCAG
GACACCACGTCGAGGTCAAGGGCAAGAACAAGGACATTGATCGCGTCCCGTTTTTAAATAGTTATATTGA
TGGGGTAACAATGGAAGAAGCAACAGTTTCAGGAATTCTAGGTAAAAGGGCCACAGACAACGGTCTGGAA
GAAATGATACTATCTAGCAACCATCAGAAGAGTGTGGCTAAGACCCAGGATCCCCAGACCACTGGCAGAA
TCACTGACAGTGGCCAAGACACGGCATTCCTGCATAGTAAATATGAAGAAAACCCAGCGTGGCCAGATTC
CCTATGCTACATCGTAAATCCTGTATCTCCTAGGATGGATGATCATGGCCTGAAGGAAATCTGTCTGGAT
CATCTGTACAGGGGCTGTCAGCAGGTCAACTGCAACAAGAACCACTTCCATCTGCCCTACCGGTGGCAGC
TGTTCATATTGCCCACTTGGATGGACTTTCAGGACATGGAGTATATCGAGCGGGCCTATTGTGATCCCCA
AATTGAAATCATTGTGATAGAAAAACATCGGATCAATTTCAAGAAAATGACTTGTGATTCCTACCCCATC
CGTCGCCTCTCCACTCCTTCATTTGTCGAAAAAACACTTAATTCTGTCTTCACCACCAAGTGGCTTTGGT
ATTGGAGGAATGAATTGAATGAATATACTCAGTATGGGCATGAGAGCCCAGGCCATACCAGCTCCGAAAT
TAATTCTGCATACCTGGAGTCTTTCTTCCACTCCTGTCCCAGGGGAGTTTTGCAGTTCCACGCTGGTTCA
CAGAATTACGAGTTAAGCTTTCAAGGGATGATTCAGACGAATATAGCTTCCAAGACTCAAAGGCATGTTG
TGAGAAGGCCAGTTTTTGTTTCTTCGAAGGATGTGGAGCAGAAGAGAAGAGGTCCAGAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: BC029090

Insert Size: 2022 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	BC029090, AAH29090
RefSeq Size:	2980 bp
RefSeq ORF:	2021 bp
Locus ID:	78781
Cytogenetics:	6 17.72 cM
Gene Summary:	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]