

# ZC3HAV1 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP5695b

# **Specification**

# ZC3HAV1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession <u>Q7Z2W4</u>
Other Accession <u>NP 064504.2</u>

# ZC3HAV1 Antibody (C-term) Blocking peptide - Additional Information

#### Gene ID 56829

#### **Other Names**

Zinc finger CCCH-type antiviral protein 1, ADP-ribosyltransferase diphtheria toxin-like 13, ARTD13, Zinc finger CCCH domain-containing protein 2, Zinc finger antiviral protein, ZAP, ZC3HAV1, ZC3HDC2

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## ZC3HAV1 Antibody (C-term) Blocking peptide - Protein Information

Name ZC3HAV1 (HGNC:23721)

Synonyms ZC3HDC2

#### **Function**

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), moloney and murine leukemia virus (MoMLV) and xenotropic MuLV-related virus (XMRV), 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 RIGI signaling resulting in activation of the downstream effector IRF3 leading to the expression of type I IFNs and IFN stimulated genes (ISGs).



# **Cellular Location**

[Isoform 1]: Cytoplasm {ECO:0000250|UniProtKB:Q8K3Y6}. Nucleus {ECO:0000250|UniProtKB:Q8K3Y6} Note=Localizes in the cytoplasm at steady state, but shuttles between nucleus and cytoplasm in a XPO1-dependent manner {ECO:0000250|UniProtKB:Q8K3Y6}

## ZC3HAV1 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

# Blocking Peptides

ZC3HAV1 Antibody (C-term) Blocking peptide - Images

# ZC3HAV1 Antibody (C-term) Blocking peptide - Background

ZC3HAV1 is a CCCH-type zinc finger protein that isthought to prevent infection by retroviruses. Studies of the rathomolog indicate that the protein may primarily function to inhibitviral gene expression and induce an innate immunity to viralinfection.

### ZC3HAV1 Antibody (C-term) Blocking peptide - References

Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)Bick, M.J., et al. J. Virol. 77(21):11555-11562(2003)Katoh, M., et al. Int. J. Oncol. 23(2):541-547(2003)Gao, G., et al. Science 297(5587):1703-1706(2002)