

# **ZCCHV Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57151

### **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession

Reactivity

Rat

Host

Clonality

Polyclonal

Calculated MW

O7Z2W4

Rat

Rabbit

Polyclonal

#### **Additional Information**

**Gene ID** 56829

**Other Names** Zinc finger CCCH-type antiviral protein 1, ADP-ribosyltransferase diphtheria

toxin-like 13, ARTD13, Inactive Poly [ADP-ribose] polymerase 13, PARP13, Zinc finger CCCH domain-containing protein 2, Zinc finger antiviral protein, ZAP,

ZC3HAV1 (HGNC:23721), ZC3HDC2

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01 M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name ZC3HAV1 ( <u>HGNC:23721</u>)

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}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.