ARG43432
anti-ZC3HAV1 / ZAP antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ZC3HAV1 / ZAP
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ZC3HAV1 / ZAP
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 604-632 of Human ZC3HAV1 / ZAP.
Conjugation	Un-conjugated
Alternate Names	Zinc finger CCCH-type antiviral protein 1; ADP-ribosyltransferase diphtheria toxin-like 13; ZC3H2; PARP13; ARTD13; ZC3HDC2; FLB6421; Zinc finger CCCH domain-containing protein 2; Zinc finger antiviral protein; ZAP

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:100
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	NCI-H460
Observed Size	~ 100 kDa

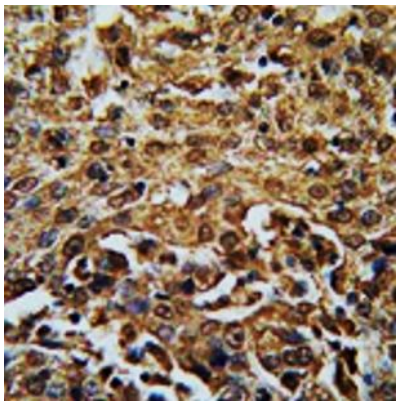
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

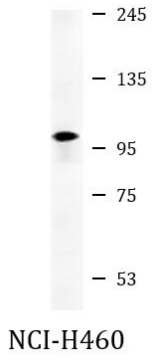
Gene Symbol	ZC3HAV1
Gene Full Name	zinc finger CCCH-type, antiviral 1
Background	This gene encodes a CCCH-type zinc finger protein that is thought to prevent infection by retroviruses. Studies of the rat homolog indicate that the protein may primarily function to inhibit viral gene expression and induce an innate immunity to viral infection. Alternative splicing occurs at this locus and two variants, each encoding distinct isoforms, are described. [provided by RefSeq, Jul 2008]
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 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). [UniProt]
Calculated Mw	101 kDa
PTM	Phosphorylation at Ser-275 is essential for sequential phosphorylation of Ser-271, Ser-267, Ser-263 and Ser-257 by GSK3-beta. Phosphorylation by GSK3-beta enhances its antiviral activity (By similarity). [UniProt]
Cellular Localization	Isoform 1: Cytoplasm. Nucleus. Note=Localizes in the cytoplasm at steady state, but shuttles between nucleus and cytoplasm in a XPO1-dependent manner. Isoform 2: Cytoplasm. [UniProt]

Images



ARG43432 anti-ZC3HAV1 / ZAP antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human cervix carcinoma tissue stained with ARG43432 anti-ZC3HAV1 / ZAP antibody.



ARG43432 anti-ZC3HAV1 / ZAP antibody WB image

Western blot: 35 µg of NCI-H460 cell lysate stained with ARG43432 anti-ZC3HAV1 / ZAP antibody.