

Datasheet for ABIN7151720
anti-ZC3H12A antibody (AA 1-260) (Biotin)



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Overview

Quantity:	100 µg
Target:	ZC3H12A
Binding Specificity:	AA 1-260
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ZC3H12A antibody is conjugated to Biotin
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Endoribonuclease ZC3H12A protein (1-260AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	ZC3H12A
Alternative Name:	ZC3H12A (ZC3H12A Products)
Background:	Background: Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells,

cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:19909337). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation-related mRNAs, such as IL6 and IL12B, during the early phase of inflammation (PubMed:26320658). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T-cell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, TNFRSF4 and TNFR2) and transcription factor (REL) (By similarity). Inhibits cooperatively with ZC3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA encoding the Th17 cell-promoting factors IL6, ICOS, REL, IRF4, NFKBID and NFKBIZ. The cooperation requires RNA-binding by RC3H1 and the nuclease activity of ZC3H12A (By similarity). Self regulates by destabilizing its own mRNA (By similarity). Cleaves mRNA harboring a stem-loop (SL), often located in their 3'-UTRs, during the early phase of inflammation in a helicase UPF1-dependent manner (PubMed:19909337, PubMed:26320658, PubMed:26134560, PubMed:22561375). Plays a role in the inhibition of microRNAs (miRNAs) biogenesis (PubMed:22055188). Cleaves the terminal loop of a set of precursor miRNAs (pre-miRNAs) important for the regulation of the inflammatory response leading to their degradation, and thus preventing the biosynthesis of mature miRNAs (PubMed:22055188). Plays also a role in promoting angiogenesis in response to inflammatory cytokines by inhibiting the production of antiangiogenic microRNAs via its anti-dicer RNase activity (PubMed:24048733). Affects the overall ubiquitination of cellular proteins (By similarity). Positively regulates deubiquitinase activity promoting the cleavage at Lys-48- and Lys-63-linked polyubiquitin chains on TNF receptor-associated factors (TRAFs), preventing JNK and NF-kappa-B signaling pathway activation, and hence negatively regulating macrophage-mediated inflammatory response and immune homeostasis (By similarity). Induces also deubiquitination of the transcription factor HIF1A, probably leading to its stabilization and nuclear import, thereby positively regulating the expression of proangiogenic HIF1A-targeted genes (PubMed:24048733). Involved in a TANK-dependent negative feedback response to attenuate NF-kappaB activation through the deubiquitination of IKBKG or TRAF6 in response to interleukin-1-beta (IL1B) stimulation or upon DNA damage (PubMed:25861989). Prevents stress granule (SGs) formation and promotes macrophage apoptosis under stress conditions, including arsenite-induced oxidative stress, heat shock and energy deprivation (By similarity). Plays a role in the regulation of macrophage polarization, promotes IL4-induced polarization of macrophages M1 into anti-inflammatory M2 state (By similarity). May also act as a transcription factor that regulates the expression of multiple genes involved in inflammatory response, angiogenesis, adipogenesis and apoptosis (PubMed:16574901, PubMed:18364357). Functions as a positive regulator of glial differentiation of neuroprogenitor cells through an

Target Details

amyloid precursor protein (APP)-dependent signaling pathway (PubMed:19185603). Attenuates septic myocardial contractile dysfunction in response to lipopolysaccharide (LPS) by reducing I-kappa-B-kinase (IKK)-mediated NF-kappa-B activation, and hence myocardial proinflammatory cytokine production (By similarity).

Aliases: dJ423B22.1 antibody, MCP 1 treatment-induced protein antibody, MCP-induced protein 1 antibody, MCP1-induced protein antibody, MCPIP 1 antibody, MCPIP antibody, Ribonuclease ZC3H12A antibody, RP3-423B22.1 antibody, ZC12A_HUMAN antibody, ZC3H 12A antibody, ZC3H12 A antibody, Zc3h12a antibody, Zinc finger CCCH domain-containing protein 12A antibody, Zinc finger CCCH type containing 12A antibody

UniProt: [Q5D1E8](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [Positive Regulation of fat Cell Differentiation](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.