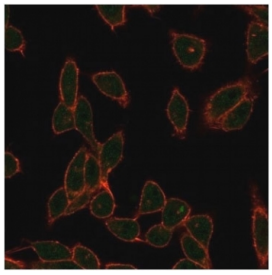
ZC3H7A Antibody / RNA Processing Factor Antibody [clone PCRP-ZC3H7A-1D6] (V9472)

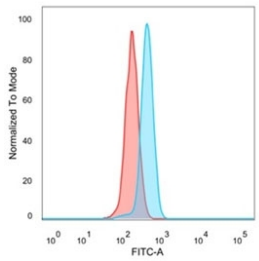
Catalog No.	Formulation	Size
V9472-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9472-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9472SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

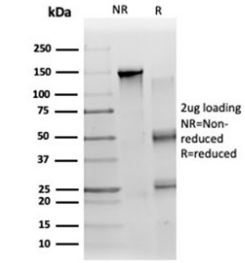
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	PCRP-ZC3H7A-1D6
Purity	Protein A/G affinity
UniProt	Q8IWR0
Localization	Nucleus, cytoplasm
Applications	ELISA (order BSA-free format for coating) Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml
Limitations	This ZC3H7A Antibody / RNA Processing Factor Antibody is available for research use only.



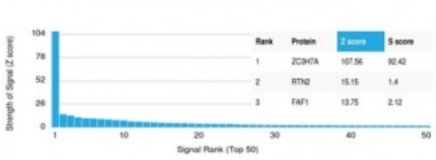
ZC3H7A Antibody HeLa IF. Immunofluorescence analysis of PFA-fixed human HeLa cells using ZC3H7A Antibody / RNA Processing Factor Antibody clone PCRP-ZC3H7A-1D6 demonstrates prominent green fluorescence throughout the cytoplasm with additional signal extending into the perinuclear region, consistent with the reported role of Zinc finger CCCH-type containing 7A (ZC3H7A) as an RNA-binding protein involved in RNA metabolism and post-transcriptional gene regulation. The staining pattern highlights the intracellular distribution expected for a protein associated with RNA processing complexes and messenger RNA regulatory pathways. Cellular architecture is visualized using phalloidin (red), which labels filamentous actin and outlines cell morphology. This immunofluorescence staining pattern supports studies of RNA processing factor biology, RNA-binding protein function, and post-transcriptional regulatory mechanisms in human cells. ZC3H7A antibody is shown in green and phalloidin is shown in red.



ZC3H7A Antibody HeLa FACS. Flow cytometry analysis of PFA-fixed human HeLa cells using ZC3H7A Antibody / RNA Processing Factor Antibody clone PCRP-ZC3H7A-1D6 demonstrates a distinct rightward shift of the blue histogram relative to the isotype control (red), indicating specific detection of Zinc finger CCCH-type containing 7A (ZC3H7A) expression. ZC3H7A is a CCCH-type zinc finger RNA-binding protein involved in RNA metabolism, messenger RNA processing, and post-transcriptional regulation of gene expression. The observed fluorescence shift is consistent with expression of this RNA processing factor in human HeLa cells and supports the use of clone PCRP-ZC3H7A-1D6 for studies of RNA-binding protein biology, transcript regulation, and cellular gene expression pathways. Blue = ZC3H7A antibody; Red = isotype control.



SDS-PAGE analysis of purified, BSA-free ZC3H7A antibody (clone PCRP-ZC3H7A-1D6) as confirmation of integrity and purity.



ZC3H7A Antibody Protein Microarray Validation. Analysis of a HuProt(TM) protein microarray containing more than 19,000 full-length human proteins using ZC3H7A Antibody / RNA Processing Factor Antibody clone PCRP-ZC3H7A-1D6 demonstrates exceptional target specificity for Zinc finger CCCH-type containing 7A (ZC3H7A). The intended target produced the highest signal on the array with a Z-score of 107.56 and an S-score of 92.42, greatly exceeding all other detected proteins. The next highest signals were observed for RTN2 and FAF1 with substantially lower Z-scores and S-scores, supporting highly selective target recognition by clone PCRP-ZC3H7A-1D6. ZC3H7A is a CCCH-type zinc finger RNA-binding protein involved in RNA metabolism and post-transcriptional gene regulation. The strong separation between the intended target and all other proteins on the array supports the use of this RNA Processing Factor Antibody for studies of RNA-binding protein biology and messenger RNA regulatory pathways. The Z-score represents signal strength relative to the array mean, while the S-score represents the specificity gap between successive ranked targets. An S-score greater than 2.5 is generally considered indicative of high target specificity.

Description

Zinc finger CCCH-type containing 7A (ZC3H7A) is a cytoplasmic and nuclear RNA-binding protein that belongs to the CCCH-type zinc finger protein family and participates in post-transcriptional regulation of gene expression. ZC3H7A Antibody / RNA Processing Factor Antibody (clone PCRP-ZC3H7A-1D6) recognizes ZC3H7A, a protein implicated in

RNA metabolism, messenger RNA processing, and the regulation of RNA-protein complexes that influence cellular gene expression programs. ZC3H7A antibody, also known as Zinc finger CCCH-type containing 7A antibody and CCCH zinc finger RNA-binding protein antibody in the literature, is useful for investigating mechanisms that control RNA stability, processing, and intracellular RNA trafficking.

ZC3H7A is encoded on chromosome 16 and produces a zinc finger-containing protein characterized by CCCH-type zinc finger motifs that mediate interactions with RNA molecules and components of ribonucleoprotein complexes. Members of the CCCH zinc finger family frequently function as regulators of RNA turnover and post-transcriptional gene expression, allowing cells to rapidly alter protein production in response to developmental cues, environmental signals, and cellular stress. Through these activities, ZC3H7A contributes to the broader network of proteins responsible for coordinating RNA processing and gene regulatory pathways.

RNA processing factors play critical roles in determining the fate of cellular transcripts. Following transcription, messenger RNAs undergo extensive processing, transport, storage, translation, and degradation. Proteins such as ZC3H7A help regulate these events through interactions with RNA molecules and associated protein complexes. This level of regulation is essential for maintaining appropriate cellular protein expression profiles and supporting normal cellular homeostasis. Consequently, disruption of RNA-binding proteins and post-transcriptional regulatory pathways has been linked to numerous human diseases, including cancer and developmental disorders.

ZC3H7A expression has been reported across multiple tissues and cell types, reflecting the widespread requirement for RNA regulatory mechanisms in normal cellular function. As interest in RNA biology continues to expand, proteins involved in mRNA metabolism and post-transcriptional regulation have become increasingly important targets for studies investigating gene expression control, stress responses, differentiation, and disease-associated regulatory networks.

Clone PCRP-ZC3H7A-1D6 is supported by Protein Microarray Validation data, providing an additional level of confidence in target recognition. Protein Microarray Validated antibodies are screened against thousands of human proteins to assess target specificity and identify potential off-target interactions. This approach supports the use of ZC3H7A Antibody for investigations of RNA processing pathways, RNA-binding protein biology, and post-transcriptional regulatory mechanisms. A ZC3H7A antibody is suitable for detecting ZC3H7A expression in relevant research applications.

Because RNA processing factors coordinate fundamental mechanisms of gene expression and cellular regulation, researchers may also be interested in our Cell Biology Antibodies landing page featuring markers involved in RNA metabolism, signaling, proliferation, and cellular homeostasis.

Application Notes

Optimal dilution of the ZC3H7A Antibody / RNA Processing Factor Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human ZC3H7A protein was used as the immunogen for the ZC3H7A antibody.

Storage

Aliquot the ZC3H7A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

RNA processing protein antibody, RNA metabolism protein antibody, CCCH zinc finger RNA-binding protein antibody, Post-transcriptional regulatory protein antibody, mRNA processing factor antibody

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