

CAPZA1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7488A

Specification

CAPZA1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW	IF, WB, FC,E <u>P52907</u> <u>Q4R959</u> Human Monkey Rabbit Polyclonal Rabbit IgG 32923
Antigen Region	1-30

CAPZA1 Antibody (N-term) - Additional Information

Gene ID 829

Other Names F-actin-capping protein subunit alpha-1, CapZ alpha-1, CAPZA1

Target/Specificity

This CAPZA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CAPZA1.

Dilution IF~~1:10~50 WB~~1:4000 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CAPZA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CAPZA1 Antibody (N-term) - Protein Information

Name CAPZA1 (<u>HGNC:1488</u>)



Function F-actin-capping proteins bind in a Ca(2+)-independent manner to the fast growing ends of actin filaments (barbed end) thereby blocking the exchange of subunits at these ends. Unlike other capping proteins (such as gelsolin and severin), these proteins do not sever actin filaments. May play a role in the formation of epithelial cell junctions (PubMed:<u>22891260</u>). Forms, with CAPZB, the barbed end of the fast growing ends of actin filaments in the dynactin complex and stabilizes dynactin structure. The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

Cellular Location

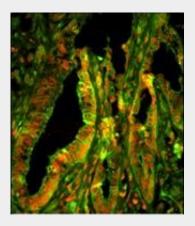
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:A0PFK5}

CAPZA1 Antibody (N-term) - Protocols

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

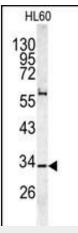
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CAPZA1 Antibody (N-term) - Images

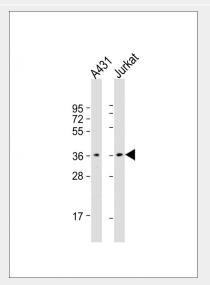


Immunofluorescence analysis of CAPZA1 Antibody (N-term) with paraffin-embedded human prostate carcinoma tissue . 0.05 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit IgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.

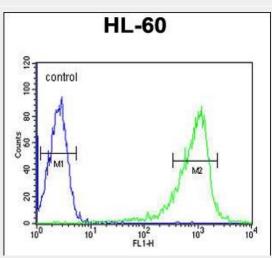




Western blot analysis of CAPZA1 antibody (N-term) (Cat.# AP7488a) in HL60 cell line lysates (35ug/lane). CAPZA1 (arrow) was detected using the purified Pab.



All lanes : Anti-CAPZA1 Antibody (N-term) at 1:4000 dilution Lane 1: A431 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CAPZA1 Antibody (N-term) (Cat. #AP7488a) flow cytometric analysis of HL-60 cells (right



histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CAPZA1 Antibody (N-term) - Background

CAPZA1 is a member of the F-actin capping protein alpha subunit family. The protein regulates growth of the actin filament by capping the barbed end of growing actin filaments.

CAPZA1 Antibody (N-term) - References

Maun,N.A., Speicher,D.W. Biochemistry 35 (11), 3518-3524 (1996) Barron-Casella,E.A., Torres,M.A. J. Biol. Chem. 270 (37), 21472-21479 (1995) Canton,D.A., Olsten,M.E. J. Biol. Chem. 281 (47), 36347-36359 (2006)