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CAPZA1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7488A

Product Information

Application	WB, IF, FC, E
Primary Accession	P52907
Other Accession	Q4R959
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17974
Calculated MW	32923
Antigen Region	1-30

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	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	CAPZA1 (HGNC:1488)
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:22891260). 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}

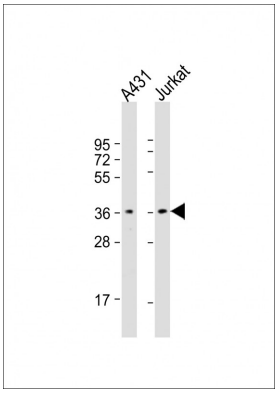
Background

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.

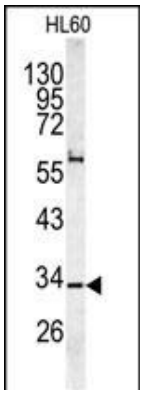
References

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)

Images

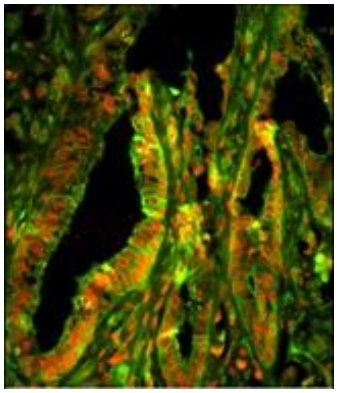


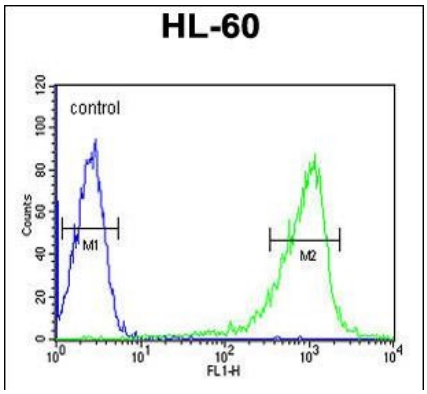
All lanes : Anti-CAPZA1 Antibody (N-term) at 1:4000 dilution Lane 1: A431 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5%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



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.

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 lgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.





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.