

#### **KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody**

Mouse monoclonal antibody Catalog # AGI2006

#### **Specification**

### **KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody - Product Information**

Application WB, FC Primary Accession P52907

Reactivity
Clonality
Monoclonal
Isotype
Mouse IgG1

Calculated MW Predicted, 33 kDa, observed, 36 kDa KDa

Gene Name CAPZA1

Aliases CAPZA1; Capping Actin Protein Of Muscle

Z-Line Subunit Alpha 1; CAPPA1; Capping Protein (Actin Filament) Muscle Z-Line, Alpha 1; Capping Actin Protein Of Muscle Z-Line Alpha Subunit 1; F-Actin-Capping Protein Subunit Alpha-1; CapZ Alpha-1;

Cap Z; CAPZ; CAZ1

Immunogen Recombinant protein of human CAPZA1

### KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody - Additional Information

Gene ID 829

**Other Names** 

F-actin-capping protein subunit alpha-1, CapZ alpha-1, CAPZA1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=1488" target="\_blank">HGNC:1488</a>)

# **KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/22891260" target="\_blank">22891260</a>). 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}

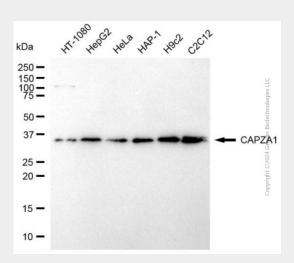


## **KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody - Protocols**

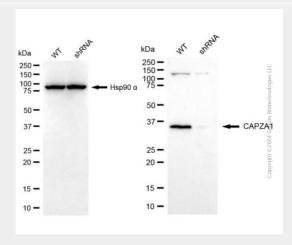
Provided below are standard protocols that you may find useful for product applications.

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

## **KD-Validated Anti-CAPZA1 Mouse Monoclonal Antibody - Images**

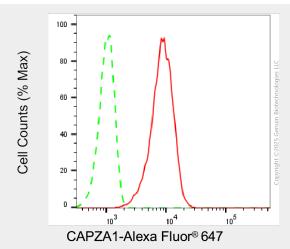


Western blotting analysis using anti-CAPZA1 antibody (Cat#AGI2006). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CAPZA1 antibody (Cat#AGI2006, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-CAPZA1 antibody (Cat#AGI2006). CAPZA1 expression in wild-type (WT) and CAPZA1 shRNA knockdown (KD) HeLa cells with 40  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-CAPZA1 antibody (Cat#AGI2006, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.





Flow cytometric analysis of CAPZA1 expression in C2C12 cells using anti-CAPZA1 antibody (Cat#AGI2006, 1:1,000). Green, isotype control; red, CAPZA1.