

For Research Use Only

# CAPZA1 Polyclonal antibody

Catalog Number:55145-1-AP



## Basic Information

<b>Catalog Number:</b> 55145-1-AP	<b>GenBank Accession Number:</b> NM_006135	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 750 ug/ml by Nanodrop and 620 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 829	<b>Recommended Dilutions:</b> WB 1:200-1:1000 IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P52907	
<b>Isotype:</b> IgG	<b>Full Name:</b> capping protein (actin filament) muscle Z-line, alpha 1	
	<b>Calculated MW:</b> 33 kDa	
	<b>Observed MW:</b> 34-40 kDa	

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB :** human heart tissue, mouse brain tissue, mouse heart tissue

**IHC :** human colon cancer tissue, human stomach cancer tissue

## Background Information

CAPZA1 belongs to the F-actin-capping protein alpha subunit family. F-actin-capping proteins bind in a Ca<sup>2+</sup>-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. The potential for CAPZ is a therapeutic target in the management of heart failure. Future research is required to determine the mechanisms by which changes in CAPZ impact myocardial function and intracellular signalling, and to develop feasible strategies that can manipulate CAPZ in the intact heart. (PMID: 15614336) This antibody is specific to CAPZA1.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

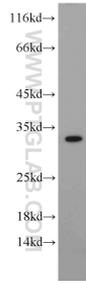
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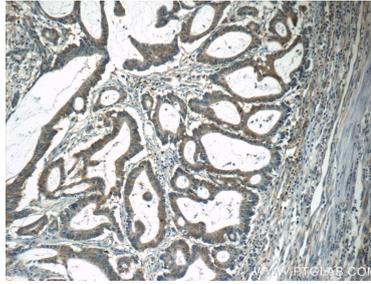
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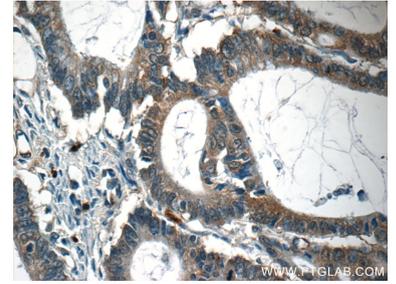
## Selected Validation Data



human heart tissue were subjected to SDS PAGE followed by western blot with 55145-1-AP (CAPZA1 antibody) at dilution of 1:200 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 55145-1-AP (CAPZA1 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 55145-1-AP (CAPZA1 Antibody) at dilution of 1:50 (under 40x lens).