CapZ-β (C-17): sc-27551

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

BACKGROUND

CapZ-β (capping protein (actin filament) muscle Z-line, β) gene encodes the β subunit of a barbed end F-actin capping protein complex. This protein complex regulates growth of the actin filament by capping the barbed end of growing actin filaments. F-actin capping protein complex is a heterodimer consisting of α and β subunits that caps the barbed ends of actin filaments and nucleates the polymerization of actin monomers, yet does not sever actin filaments. Capping protein binds to the barbed ends of actin filaments and prevents the addition and loss of actin monomers at the end.

REFERENCES

1. Barron-Casella, E.A., et al. 1995. Sequence analysis and chromosomal localization of human CapZ. Conserved residues within the actin-binding domain may link CapZ to gelsolin/severin and profilin protein families. J. Biol. Chem. 270: 21472-21479.

2. Ivanenkov, V.V., et al. 1996. Interaction of S100a0 protein with the actin capping protein, CapZ: characterization of a putative S100a0 binding site in CapZ α-subunit. Biochem. Biophys. Res. Commun. 221: 46-50.

CHROMOSOMAL LOCATION

Genetic locus: CAPZB (human) mapping to 1p36.13; Capzb (mouse) mapping to 4 D3.

SOURCE

CapZ-β (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CapZ-β of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27551 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CapZ-β (C-17) is recommended for detection of CapZ-β isoforms 1 and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CapZ-β (C-17) is also recommended for detection of CapZ-β isoforms 1 and 3 in additional species, including porcine and avian.

Suitable for use as control antibody for CapZ-β siRNA (h): sc-43661, CapZ-β siRNA (m): sc-45351, CapZ-β shRNA Plasmid (h): sc-43661-SH, CapZ-β shRNA Plasmid (m): sc-45351-SH, CapZ-β shRNA (h) Lentiviral Particles: sc-43661-V and CapZ-β shRNA (m) Lentiviral Particles: sc-45351-V.

Molecular Weight of CapZ-β: 31 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA
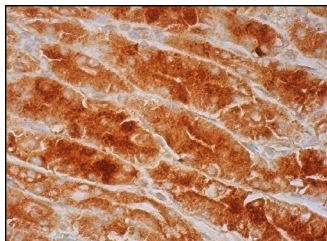
CapZ-β (C-17): sc-27551. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfation
Guaranteed

Try **CapZ-β (52): sc-136502**, our highly recommended monoclonal alternative to CapZ-β (C-17).