CapZ-β (52): sc-136502

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

3. Hutchings, N.J., et al. 2003. Linking the T cell surface protein CD2 to CapZ-β (52): Western blot analysis of CapZ-β expression in HeLa (A), HL-60 (B), MOLT-4 (C), A549 (D), Hep G2 (E) and K-562 (F) whole cell lysates. Detection reagent used: m-IgG BP-HRP: sc-51602.

CHROMOSOMAL LOCATION

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

SOURCE

CapZ-β (52) is a mouse monoclonal antibody raised against amino acids 162-267 of CapZ-β of human origin.

PRODUCT

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

CapZ-β (52) is available conjugated to agarose (sc-136502 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-136502 HRP), 200 μg/ml, for WB, IHC(P) and ELISA.

STORAGE

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

APPLICATIONS

CapZ-β (52) is recommended for detection of CapZ-β isoforms 1 and 2 of mouse, rat, human, canine and avian origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)]. Suitable for use as control antibody for CapZ-β siRNA (h): sc-43661, CapZ-β siRNA (m): sc-43531, CapZ-β shRNA Plasmid (h): sc-43661-SH, CapZ-β shRNA Plasmid (m): sc-43531-SH, CapZ-β shRNA (h) Lentiviral Particles: sc-43661-V and CapZ-β shRNA (m) Lentiviral Particles: sc-43531-V.

Molecular Weight of CapZ-β: 31 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG HRP (sc-43661); m-IgG BP-HRP: sc-516102 or m-IgG HRP, 200 µg/ml, for WB, IHC(P) and ELISA.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

SELECT PRODUT CITATIONS


RESEARCH USE

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

PROTOCOLS

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