

CapZ- α (H-130): sc-292144

BACKGROUND

The F-actin family of capping proteins includes CapZ- α 1, CapZ- α 2, CapZ- α 3 and CapZ- β 3, all of which function in a calcium-dependent manner and bind to the fast growing barbed end of actin filaments, thereby blocking protein exchange at these ends. The 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. CapZ- α 1, also known as F-actin-capping protein subunit α -1, is a 286 amino acid subunit of the heterodimer that forms the F-actin capping protein complex. CapZ- α 1 also has been shown to bind S-100 β chain, a signaling molecule involved in the calcium-sensitive assembly of intermediate filaments that has been linked to Alzheimer's disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CAPZA1 (human) mapping to 1p13.2, CAPZA2 (human) mapping to 7q31.2; Capza1 (mouse) mapping to 3 F2.2, Capza2 (mouse) mapping to 6 A2.

SOURCE

CapZ- α (H-130) is a rabbit polyclonal antibody raised against amino acids 157-286 mapping at the C-terminus of CapZ- α 1 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

CapZ- α (H-130) is recommended for detection of CapZ- α 1 and CapZ- α 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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- α (H-130) is also recommended for detection of CapZ- α 1 and CapZ- α 2 in additional species, including equine, canine, bovine, porcine and avian.

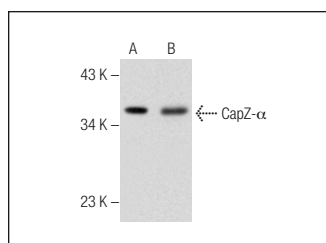
Molecular Weight of CapZ- α : 36 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or T24 cell lysate: sc-2292.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CapZ- α (H-130): sc-292144. Western blot analysis of CapZ- α expression in A-431 (A) and T24 (B) whole cell lysates.

STORAGE

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



Try **CapZ- α (H-9): sc-374302** or **CapZ- α (C-7): sc-376134**, our highly recommended monoclonal alternatives to CapZ- α (H-130).