SANTA CRUZ BIOTECHNOLOGY, INC.

Adducin γ (H-60): sc-25733



BACKGROUND

Adducins are a family of cytoskeleton proteins encoded by three genes (α , β and γ). Adducin is a protein associated with the inner leaflet of the plasma membrane and is one of the proteins localized at the spectrin-actin junction of the membrane skeleton. The cortical actin cytoskeletal network is lost during apoptosis and adducins are central in the cortical actin network organization. Adducin α is a cytoskeletal protein involved with sodium-pump activity in the renal tubule and is associated with hypertension. The expression of Adducin α and Adducin γ is ubiquitous in contrast to the restricted expression of Adducin β . Adducin β is expressed at high levels in brain and hematopoietic tissues, such as bone marrow in humans, and spleen in mice.

CHROMOSOMAL LOCATION

Genetic locus: ADD3 (human) mapping to 10q25.1; Add3 (mouse) mapping to 19 D2.

SOURCE

Adducin γ (H-60) is a rabbit polyclonal antibody raised against amino acids 571-630 of Adducin γ of human origin.

PRODUCT

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

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

Adducin γ (H-60) is recommended for detection of Adducin γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Adducin γ (H-60) is also recommended for detection of Adducin γ in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Adducin γ siRNA (h): sc-29640, Adducin γ siRNA (m): sc-29641, Adducin γ shRNA Plasmid (h): sc-29640-SH, Adducin γ shRNA Plasmid (m): sc-29641-SH, Adducin γ shRNA (h) Lentiviral Particles: sc-29640-V and Adducin γ shRNA (m) Lentiviral Particles: sc-29641-V.

Molecular Weight of Adducin y: 94 kDa.

Positive Controls: Adducin γ (m): 293T Lysate: sc-118249, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

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. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





Adducin γ (H-60): sc-25733. Western blot analysis of Adducin γ expression in non-transfected: sc-117752 (**A**) and mouse Adducin γ transfected: sc-118249 (**B**) 293T whole cell lysates.

Adducin γ (H-60): sc-25733. Immunofluorescence staining of methanol-fixed JEG-3 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- 1. Sahr, K.E., et al. 2009. Targeted deletion of the adducin γ gene (Add3) in mice reveals differences in adducin β interactions in erythroid and nonerythroid cells. Am. J. Hematol. 84: 354-361.
- Kubo, H., et al. 2009. Identification of mesenchymal stem cell (MSC)transcription factors by microarray and knockdown analyses, and signature molecule-marked MSC in bone marrow by immunohistochemistry. Genes Cells 14: 407-424.
- Dimke, H., et al. 2011. γ-Adducin stimulates the thiazide-sensitive NaCl cotransporter. J. Am. Soc. Nephrol. 22: 508-517.

PROTOCOLS

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

MONOS Satisfation Guaranteed Try Adducin γ (G-2): sc-365177 or Adducin γ (D-11): sc-365178, our highly recommended monoclonal aternatives to Adducin γ (H-60).