## BACKGROUND

Adducins are a family of cytoskeleton proteins encoded by three genes ( $\alpha, \beta$ and $\gamma$ ). 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 $\alpha$ is a cytoskeletal protein involved with sodiumpump activity in the renal tubule and is associated with hypertension. The expression of Adducin $\alpha$ and Adducin $\gamma$ is ubiquitous in contrast to the restricted expression of Adducin $\beta$. Adducin $\beta$ is expressed at high levels in brain and hematopoietic tissues, such as bone marrow in humans and spleen in mice.

## REFERENCES

1. Chapline, C., et al. 1993. Interaction cloning of protein kinase C substrates. J. Biol. Chem. 268: 6858-6861.
2. Burns, M.E., et al. 1998. Rabphilin-3A: a multifunctional regulator of synaptic vesicle traffic. J. Gen. Physiol. 111: 243-255.

## CHROMOSOMAL LOCATION

Genetic locus: ADD2 (human) mapping to 2p13.3; Add2 (mouse) mapping to 6 D1.

## SOURCE

Adducin $\beta$ ( $\mathrm{N}-19$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the $N$-terminus of Adducin $\beta$ of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-11878 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## APPLICATIONS

Adducin $\beta(\mathrm{N}-19)$ is recommended for detection of Adducin $\beta$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ 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).

Adducin $\beta$ ( $\mathrm{N}-19$ ) is also recommended for detection of Adducin $\beta$ in additional species, including equine, bovine and porcine.
Suitable for use as control antibody for Adducin $\beta$ siRNA (h): sc-37060, Adducin $\beta$ siRNA (m): sc-37061, Adducin b shRNA Plasmid (h): sc-37060-SH, Adducin $\beta$ shRNA Plasmid ( m ): sc-37061-SH, Adducin $\beta$ shRNA (h) Lentiviral Particles: sc-37060-V and Adducin $\beta$ shRNA ( m ) Lentiviral Particles: sc-37061-V.
Molecular Weight of Adducin $\beta$ : 97 kDa .
Positive Controls: Adducin $\beta$ (h2): 293T Lysate: sc-117077, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

## 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 MarkerTM 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose $/ 2.0 \mathrm{ml}$ ). 3) 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 ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



Adducin $\beta$ ( $\mathrm{N}-19$ ): sc-11878. Western blot analysis of Adducin $\beta$ expression in non-transfected: sc-117752 (A) and human Adducin $\beta$ transfected: sc-117077 (B) 293T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

Try Adducin $\boldsymbol{\beta}$ (E-11): sc-376063, our highly recommended monoclonal aternative to Adducin $\beta$ ( $\mathrm{N}-19$ ).

