SANTA CRUZ BIOTECHNOLOGY, INC.

Adducin β (h): 293T Lysate: sc-112593

BACKGROUND

Adducins are a family of cytoskeleton proteins encoded by three genes (α, β, 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 in 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.
3. Busjahn, A., et al. 1999. Linkage but lack of association for blood pressure and the α-Adducin locus in normotensive twins. J. Hypertens. 17: 1437-1441.
4. Gilligan, D.M., et al. 1999. Targeted disruption of the β Adducin gene (Add2) causes red blood cell spherocytosis in mice. Proc. Natl. Acad. Sci. USA 96: 10717-10722.
5. Muro, A.F., et al. 2000. Mild spherocytic hereditary elliptocytosis and altered levels of α- and γ-Adducins in β-Adducin-deficient mice. Blood 95: 3978-3985.
6. Psaty, B.M., et al. 2000. Association of the α-Adducin polymorphism with blood pressure and risk of myocardial infarction. J. Hum. Hypertens. 14: 95-97.
7. van De Water, B., et al. 2000. Cleavage of the Actin-capping protein α-Adducin at Asp-Asp-Ser-Asp633-Ala by caspase-3 is preceded by its phosphorylation on serine 726 in cisplatin-induced apoptosis of renal epithelial cells. J. Biol. Chem. 275: 25805-25813.

CHROMOSOMAL LOCATION

Genetic locus: ADD2 (human) mapping to 2p13.3.

PRODUCT

Adducin β (h): 293T Lysate represents a lysate of human Adducin β transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Adducin β (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Adducin β antibodies. Recommended use: 10-20 µl per lane.

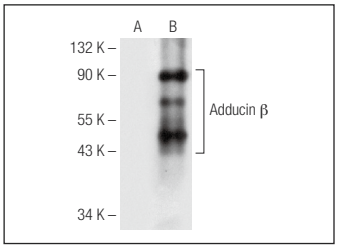
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Adducin β (E-11): sc-376063 is recommended as a positive control antibody for Western Blot analysis of enhanced human Adducin β expression in Adducin β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Adducin β (E-11): sc-376063. Western blot analysis of Adducin β expression in non-transfected: sc-117752 (**A**) and human Adducin β transfected: sc-112593 (**B**) 293T whole cell lysates.

RESEARCH USE

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