

Adducin γ (H-16): sc-11884

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.

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. Gilligan, D.M., et al. 1999. Targeted disruption of the adducin β gene (Add2) causes red blood cell spherocytosis in mice. *Proc. Natl. Acad. Sci. USA* 96: 10717-10722.
4. Busjahn, A., et al. 1999. Linkage but lack of association for blood pressure and the adducin α locus in normotensive twins. *J. Hypertens.* 17: 1437-1441.
5. Muro, A.F., et al. 2000. Mild spherocytic hereditary elliptocytosis and altered levels of α and γ adducins in adducin β -deficient mice. *Blood* 95: 3978-3985.
6. 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: ADD3 (human) mapping to 10q25.1; Add3 (mouse) mapping to 19 D2.

SOURCE

Adducin γ (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Adducin γ 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.

Blocking peptide available for competition studies, sc-11884 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Adducin γ (H-16) 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 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).

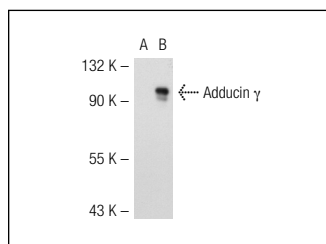
Adducin γ (H-16) is also recommended for detection of adducin γ in additional species, including equine.

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 γ : 94 kDa.

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

DATA



Adducin γ (H-16): sc-11884. 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.

STORAGE

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

PROTOCOLS

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



Try **Adducin γ (G-2): sc-365177** or **Adducin γ (D-11): sc-365178**, our highly recommended monoclonal alternatives to Adducin γ (H-16).