CapZ-β (m): 293T Lysate: sc-125095



The Power to Question

BACKGROUND

CapZ- β (capping protein (Actin filament) muscle Z-line, β) gene encodes the β subunit of a barbed-end F-Actin capping protein complex. This protein complex regulates growth of the Actin filament by capping the barbed end of growing Actin filaments. 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. Capping protein binds to the barbed ends of Actin filaments and prevents the addition and loss of Actin monomers at the end.

REFERENCES

- Barron-Casella, E.A., Torres, M.A., Scherer, S.W., Heng, H.H., Tsui, L.C. and Casella, J.F. 1995. Sequence analysis and chromosomal localization of human CapZ. Conserved residues within the Actin-binding domain may link CapZ to gelsolin/severin and profilin protein families. J. Biol. Chem. 270: 21472-21479.
- Ivanenkov, V.V., Dimlich, R.V. and Jamieson, G.A., Jr. 1996. Interaction of S100a0 protein with the Actin capping protein, CapZ: characterization of a putative S100a0 binding site in CapZ-α-subunit. Biochem. Biophys. Res. Commun. 221: 46-50.
- Yamashita, A., Maeda, K. and Maéda, Y. 2003. Crystal structure of CapZ: structural basis for Actin filament barbed end capping. EMBO J. 22: 1529-1538.
- Hutchings, N.J., Clarkson, N., Chalkley, R., Barclay, A.N. and Brown, M.H. 2003. Linking the T cell surface protein CD2 to the Actin-capping protein CapZ via CMS and CIN85. J. Biol. Chem. 278: 22396-22403.
- McGregor, E., Kempster, L., Wait, R., Gosling, M., Dunn, M.J. and Powell, J.T. 2004. F-Actin capping (CapZ) and other contractile saphenous vein smooth muscle proteins are altered by hemodynamic stress: a proteonomic approach. Mol. Cell. Proteomics 3: 115-124.

CHROMOSOMAL LOCATION

Genetic locus: Capzb (mouse) mapping to 4 D3.

PRODUCT

CapZ- β (m): 293T Lysate represents a lysate of mouse CapZ- β transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

CapZ- β (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CapZ- 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.

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.

RESEARCH USE

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

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com