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Calponin 3 (h): 293T Lysate: sc-173030

BACKGROUND

Calponin regulates smooth muscle cell contraction and is a marker of smooth muscle cell differentiation. Calponin, an Actin- and Tropomyosin-binding protein, is characterized as an inhibitory factor of smooth-muscle actomyosin activity. Calponin is implicated in the regulation of smooth muscle contraction through its interaction with F-Actin and inhibition of the Actin-activated Mg-ATPase activity of phosphorylated Myosin. Both properties are lost following phosphorylation (primarily at Serine 175) by protein kinase C or calmodulin-dependent protein kinase II. The three forms of Calponin, Calponin 1 (basic calponin), Calponin 2 (neutral calponin) and Calponin 3 (acidic calponin) are found in smooth muscle tissue. Additionally, Calponin 2 is found in heart muscle tissue and Calponin 3 is found in the brain.

REFERENCES

1. Tang, D.C., Kang, H.M., Jin, J.P., Fraser, E.D. and Walsh, M.P. 1996. Structure-function relations of smooth muscle Calponin. The critical role of Serine 175. *J. Biol. Chem.* 271: 8605-8611.
2. Masuda, H., Tanaka, K., Takagi, M., Ohgami, K., Sakamaki, T., Shibata, N. and Takahashi, K. 1996. Molecular cloning and characterization of human non-smooth muscle Calponin. *J. Biochem.* 120: 415-424.
3. Doi, M., Kasuya, H., Weir, B., Cook, D.A. and Ogawa, A. 1997. Reduced expression of Calponin in canine basilar artery after subarachnoid haemorrhage. *Acta Neurochir.* 139: 77-81.
4. Kaneko, T., Amano, M., Maeda, A., Goto, H., Takahashi, K., Ito, M. and Kaibuchi, K. 2000. Identification of Calponin as a novel substrate of Rho-kinase. *Biochem. Biophys. Res. Commun.* 273: 110-116.
5. di Gioia, C.R., van de Greef, W.M., Sperti, G., Castoldi, G., Todaro, N., Ierardi, C., Pieruzzi, F. and Stella, A. 2000. Angiotensin II increases Calponin expression in cultured rat vascular smooth muscle cells. *Biochem. Biophys. Res. Commun.* 279: 965-969.
6. Yoshimoto, R., Hori, M., Ozaki, H. and Karaki, H. 2000. Proteolysis of acidic Calponin by μ -Calpain. *J. Biochem.* 128: 1045-1049.

CHROMOSOMAL LOCATION

Genetic locus: CNN3 (human) mapping to 1p21.3.

PRODUCT

Calponin 3 (h): 293T Lysate represents a lysate of human Calponin 3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Calponin 3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Calponin 3 antibodies. Recommended use: 10-20 μ l 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.