SANTA CRUZ BIOTECHNOLOGY, INC.

MSE55 (h3): 293T Lysate: sc-175134

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MSE55 (also known as Borg5 or binder of Rho GTPases 5) is a Cdc42 effector protein that induces long cellular extensions in fibroblasts. MSE55 also increases and mediates Actin cytoskeleton reorganization at the plasma membrane. MSE55 is a nonkinase CRIB (Cdc42/Rac interactive-binding) domain-containing molecule. An intact CRIB domain is required for the GTP-dependent binding of MSE55 to Cdc42. MSE55 is expressed in a tissue-specific manner in both endothelial and bone marrow stromal cells. MSE55 may have a functional role in hematopoiesis or as a negative regulator of Rho GTPase signaling.

REFERENCES

1. Bahou, W.F., Campbell, A.D. and Wicha, M.S. 1992. cDNA cloning and molecular characterization of MSE55, a novel human serum constituent protein that displays bone marrow stromal/endothelial cell-specific expression. J. Biol. Chem. 267: 13986-13992.
2. Burbelo, P.D., Drechsel, D. and Hall, A. 1995. A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases. J. Biol. Chem. 270: 29071-29074.
3. Neudauer, C.L., Joberty, G., Tatsis, N. and Macara, I.G. 1998. Distinct cellular effects and interactions of the Rho-family GTPase TC10. Curr. Biol. 8: 1151-1160.
4. Burbelo, P.D., Snow, D.M., Bahou, W. and Spiegel, S. 1999. MSE55, a Cdc42 effector protein, induces long cellular extensions in fibroblasts. Proc. Natl. Acad. Sci. USA 96: 9083-9088.
5. Joberty, G., Perlungher, R.R. and Macara, I.G. 1999. The borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins. Mol. Cell. Biol. 19: 6585-6597.

CHROMOSOMAL LOCATION

Genetic locus: CDC42EP1 (human) mapping to 22q13.1.

PRODUCT

MSE55 (h3): 293T Lysate represents a lysate of human MSE55 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

MSE55 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive MSE55 antibodies.

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.