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SANTA CRUZ BIOTECHNOLOGY, INC.

INSM1 (m): 293T Lysate: sc-127011

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

INSM1 (insulinoma-associated protein 1), also known as zinc-finger protein IA-1, is a developmentally regulated zinc-finger transcription factor. It localizes to the nucleus and is expressed in embryonic tissues undergoing neuroendocrine differentiation. INSM1 is not expressed in normal adult tissues but it can be found highly expressed in neuroendocrine tumors. INSM1 contains five Cys_2-His_2-type zinc-finger DNA binding domains and a prohormone domain. INSM1 acts as a transcriptional repressor of the Neuro D promoter and recruits cyclin D1 as a corepressor. It plays an important role in neuroendocrine development and is required for normal differentiation of pancreatic endocrine cells. Inhibition of INSM1 results in decreased formation of Glucagon and Insulin positive cells. The gene encoding INSM1 is directly regulated by Neurogenin 3 which binds chromatin in the INSM1 promoter region and induces transcription.

REFERENCES

1. Li, Q., Notkins, A.L. and Lan, M.S. 1997. Molecular characterization of the promoter region of a neuroendocrine tumor marker, IA-1. Biochem. Biophys. Res. Commun. 236: 776-781.
2. Breslin, M.B., Zhu, M., Notkins, A.L. and Lan, M.S. 2002. Neuroendocrine differentiation factor, IA-1, is a transcriptional repressor and contains a specific DNA-binding domain: identification of consensus IA-1 binding sequence. Nucleic Acids Res. 30: 1038-1045.
3. Xie, J., Cai, T., Zhang, H., Lan, M.S. and Notkins, A.L. 2002. The zinc-finger transcription factor INSM1 is expressed during embryo development and interacts with the Cbl-associated protein. Genomics 80: 54-61.
4. Breslin, M.B., Zhu, M. and Lan, M.S. 2003. Neuro D1/E47 regulates the E-box element of a novel zinc-finger transcription factor, IA-1, in developing nervous system. J. Biol. Chem. 278: 38991-38997.
5. Liu, W.D., Wang, H.W., Muguira, M., Breslin, M.B. and Lan, M.S. 2006. INSM1 functions as a transcriptional repressor of the Neuro D/β2 gene through the recruitment of cyclin D1 and histone deacetylases. Biochem. J. 397: 169-177.
6. Mellitzer, G., Bonné, S., Luco, R.F., Van De Casteele, M., Lenne-Samuel, N., Collombat, P., Mansouri, A., Lee, J., Lan, M., Pipeleers, D., Nielsen, F.C., Ferrer, J., Gradwohl, G. and Heimberg, H. 2006. IA1 is NGN3-dependent and essential for differentiation of the endocrine pancreas. EMBO J. 25: 1344-1352.
7. Gierl, M.S., Karoulias, N., Wende, H., Strehle, M. and Birchmeier, C. 2006. The zinc-finger factor Insm1 (IA-1) is essential for the development of pancreatic β cells and intestinal endocrine cells. Genes Dev. 20: 2465-2478.
8. Lukowski, C.M., Ritzel, R.G. and Waskiewicz, A.J. 2006. Expression of two insm1-like genes in the developing zebrafish nervous system. Gene Expr. Patterns 6: 711-718.
9. Breslin, M.B., Wang, H.W., Pierce, A., Aucoin, R. and Lan, M.S. 2007. Neurogenin 3 recruits CBP co-activator to facilitate histone H3/H4 acetylation in the target gene INSM1. FEBS Lett. 581: 949-954.

CHROMOSOMAL LOCATION

Genetic locus: Insm1 (mouse) mapping to 2 G1.

PRODUCT

INSM1 (m): 293T Lysate represents a lysate of mouse INSM1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

INSM1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive INSM1 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.

RESEARCH USE

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

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.