

FAM84A (h): 293T Lysate: sc-175344

BACKGROUND

FAM84A (family with sequence similarity 84, member A), also known as NSE1 (neurologic sensory protein 1), is a 292 amino acid protein that belongs to the FAM84 family of proteins. Predominantly expressed in testis, FAM84A shares 44% amino acid identity with the related protein FAM84B. FAM84A localizes to a subcellular membrane region where there is no contact between neighboring cells and is believed to play a role in cell morphology and motility. More specifically, the expression of FAM84A increases cell motility. Two FAM84A isoforms are expressed due to alternative splicing events. Isoform 2 can be phosphorylated on various serine residues and this phosphorylation is associated with cellular morphology. FAM84A is upregulated in colorectal cancer, lung cancer, pancreatic cancer, cholangiocarcinoma and bladder cancer tissues. Via its ability to increase cell motility, FAM84A may contribute to the invasion and metastasis of cancer cells.

REFERENCES

1. Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
2. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611234. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Kobayashi, T., Masaki, T., Sugiyama, M., Atomi, Y., Furukawa, Y. and Nakamura, Y. 2006. A gene encoding a family with sequence similarity 84, member A (FAM84A) enhanced migration of human colon cancer cells. *Int. J. Oncol.* 29: 341-347.
4. Pebernard, S., Perry, J.J., Tainer, J.A. and Boddy, M.N. 2008. Nse1 RING-like domain supports functions of the Smc5-Smc6 holocomplex in genome stability. *Mol. Biol. Cell* 19: 4099-4109.
5. Gouyer, V., Fontaine, D., Dumont, P., de Wever, O., Fontayne-Devaud, H., Leteurtre, E., Truant, S., Delacour, D., Drobecq, H., Kerckaert, J.P., de Launoit, Y., Bracke, M., Gespach, C., Desseyn, J.L. and Huet, G. 2008. Autocrine induction of invasion and metastasis by tumor-associated trypsin inhibitor in human colon cancer cells. *Oncogene* 27: 4024-4033.

CHROMOSOMAL LOCATION

Genetic locus: FAM84A (human) mapping to 2p24.3.

PRODUCT

FAM84A (h): 293T Lysate represents a lysate of human FAM84A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

FAM84A (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FAM84A antibodies. Recommended use: 10-20 µl per lane.

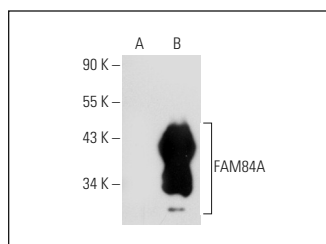
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FAM84A (BA-9): sc-101207 is recommended as a positive control antibody for Western Blot analysis of enhanced human FAM84A expression in FAM84A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



FAM84A (BA-9): sc-101207. Western blot analysis of FAM84A expression in non-transfected: sc-117752 (A) and human FAM84A transfected: sc-175344 (B) 293T whole cell lysates.

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.