

# FAM84A (BA-9): sc-101207

## 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., 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<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611234. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Kobayashi, T., et al. 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., et al. 2008. Nse1 RING-like domain supports functions of the Smc5-Smc6 holocomplex in genome stability. *Mol. Biol. Cell* 19: 4099-4109.
5. Gouyer, V., et al. 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.

## SOURCE

FAM84A (BA-9) is a mouse monoclonal antibody raised against recombinant FAM84A of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## APPLICATIONS

FAM84A (BA-9) is recommended for detection of FAM84A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FAM84A siRNA (h): sc-75958, FAM84A shRNA Plasmid (h): sc-75958-SH and FAM84A shRNA (h) Lentiviral Particles: sc-75958-V.

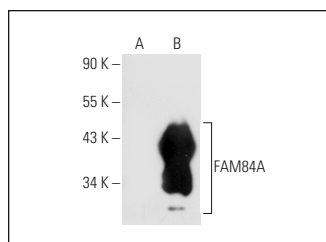
Molecular Weight of FAM84A: 33 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209 or FAM84A (h): 293T Lysate: sc-175344.

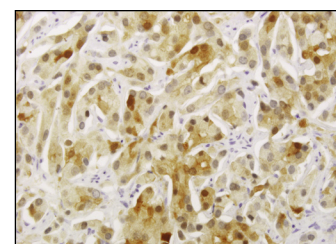
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## 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.



FAM84A (BA-9): sc-101207. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human prostate cancer tissue showing cytoplasmic localization.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.