# Mindin (h): 293T Lysate: sc-114252



The Power to Question

#### **BACKGROUND**

The thrombospondin proteins, Thrombospondins 1-4 and Thrombospondin 5 (also designated COMP), compose a family of glycoproteins that are involved in cell-to-cell and cell-to-matrix signaling. These extracellular, cell-surface proteins form complexes of both homo- and heteromultimers. Spondin-2, or Mindin, is also designated DIL-1 for its differential expression in cancerous and non-cancerous lung cells. Full-length SPON2 cDNA encodes a 331 amino acid protein with a domain arrangement similar to zebrafish F-Spondin and Mindin-1/Mindin-2: an FS1 domain, an FS2 domain, a hydrophobic signal sequence in the N-terminus and a thrombospondin type I repeat. Immunoblot analysis demonstrates expression of dimers and oligomers in a concentration-dependent manner under nonreducing conditions.

#### **REFERENCES**

- Higashijima, S., Nose, A., Eguchi, G., Hotta, Y. and Okamoto, H. 1997.
  Mindin/F-Spondin family: novel ECM proteins expressed in the zebrafish embryonic axis. Dev. Biol. 192: 211-227.
- Feinstein, Y., Borrell, V., Garcia, C., Burstyn-Cohen, T., Tzarfaty, V., Frumkin, A., Nose, A., Okamoto, H., Higashijima, S., Soriano, E. and Klar, A. 1999. F-Spondin and Mindin: two structurally and functionally related genes expressed in the hippocampus that promote outgrowth of embryonic hippocampal neurons. Development 126: 3637-3648.
- Manda, R., Kohno, T., Matsuno, Y., Takenoshita, S., Kuwano, H. and Yokota, J. 1999. Identification of genes (SPON2 and C20orf2) differentially expressed between cancerous and noncancerous lung cells by mRNA differential display. Genomics 61: 5-14.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605918. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- He, Y.W., Li, H., Zhang, J., Hsu, C.L., Lin, E., Zhang, N., Guo, J., Forbush, K.A. and Bevan, M.J. 2004. The extracellular matrix protein Mindin is a patternrecognition molecule for microbial pathogens. Nat. Immunol. 5: 88-97.
- Feinstein, Y. and Klar, A. 2004. The neuronal class 2 TSR proteins F-Spondin and Mindin: a small family with divergent biological activities. Int. J. Biochem. Cell Biol. 36: 975-980.
- Jia, W., Li, H. and He, Y.W. 2005. The extracellular matrix protein Mindin serves as an integrin ligand and is critical for inflammatory cell recruitment. Blood 106: 3854-3859.
- Li, H., Oliver, T., Jia, W. and He, Y.W. 2006. Efficient dendritic cell priming of T lymphocytes depends on the extracellular matrix protein Mindin. EMBO J. 25: 4097-4107.

# CHROMOSOMAL LOCATION

Genetic locus: SPON2 (human) mapping to 4p16.3.

## **PRODUCT**

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

## **APPLICATIONS**

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

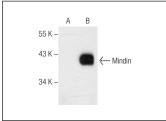
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

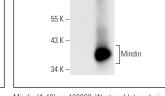
Mindin (D-4): sc-376562 is recommended as a positive control antibody for Western Blot analysis of enhanced human Mindin expression in Mindin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

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

#### DATA





Mindin (D-4): sc-376562. Western blot analysis of Mindin expression in non-transfected: sc-117752 (**A**) and human Mindin transfected: sc-114252 (**B**) 293T whole cell Ivsates.

Mindin (A-10): sc-166868. Western blot analysis of Mindin expression in non-transfected: sc-117752 (A) and human Mindin transfected: sc-114252 (B) 2931 whole cell Ivsates.

#### **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.