

Mindin (A-10): sc-166868

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., et al. 1997. Mindin/F-Spondin family: novel ECM proteins expressed in the zebrafish embryonic axis. *Dev. Biol.* 192: 211-227.
- Feinstein, Y., et al. 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., et al. 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/>

CHROMOSOMAL LOCATION

Genetic locus: SPON2 (human) mapping to 4p16.3; Spon2 (mouse) mapping to 5 B1.

SOURCE

Mindin (A-10) is a mouse monoclonal antibody raised against amino acids 196-331 mapping at the C-terminus of Mindin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Mindin (A-10) is available conjugated to agarose (sc-166868 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166868 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166868 PE), fluorescein (sc-166868 FITC), Alexa Fluor[®] 488 (sc-166868 AF488), Alexa Fluor[®] 546 (sc-166868 AF546), Alexa Fluor[®] 594 (sc-166868 AF594) or Alexa Fluor[®] 647 (sc-166868 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166868 AF680) or Alexa Fluor[®] 790 (sc-166868 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Mindin (A-10) is recommended for detection of Mindin and mature Spondin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 Mindin siRNA (h): sc-61046, Mindin siRNA (m): sc-61047, Mindin shRNA Plasmid (h): sc-61046-SH, Mindin shRNA Plasmid (m): sc-61047-SH, Mindin shRNA (h) Lentiviral Particles: sc-61046-V and Mindin shRNA (m) Lentiviral Particles: sc-61047-V.

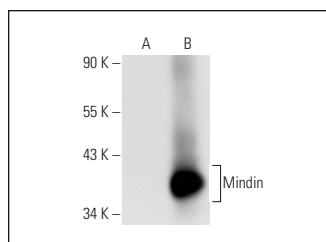
Molecular Weight of Mindin: 36 kDa.

Positive Controls: Mindin (h): 293T Lysate: sc-114252.

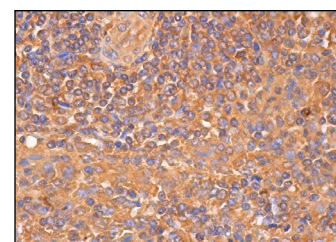
RECOMMENDED SUPPORT REAGENTS

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. 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[®] Mounting Medium: sc-24941 or UltraCruz[®] 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



Mindin (A-10): sc-166868. Western blot analysis of Mindin expression in non-transfected: sc-117752 (A) and human Mindin transfected: sc-114252 (B) 293T whole cell lysates.



Mindin (A-10): sc-166868. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and cells in red pulp.

SELECT PRODUCT CITATIONS

- Berglund, E., et al. 2018. Spatial maps of prostate cancer transcriptomes reveal an unexplored landscape of heterogeneity. *Nat. Commun.* 9: 2419.
- Bai, T., et al. 2022. Deficiency of Mindin reduces renal injury after ischemia reperfusion. *Mol. Med.* 28: 152.

STORAGE

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