

SRCRB4D (A-10): sc-515760

BACKGROUND

Scavenger receptors mediate the endocytosis and degradation of chemically modified low density lipoproteins (LDL), such as acetylated LDL (Ac-LDL) and oxidized LDL (Ox-LDL). SRCRB4D (scavenger receptor cysteine rich domain containing, group B (4 domains)), also known as S4D-SRCRB or SRCRB-S4D, is a 575 amino acid member of the SRCR (scavenger receptor cysteine-rich) superfamily. Members of this superfamily are secreted or cell surface membrane-bound proteins with highly conserved SRCR domains and may play a role in the development and regulation of the immune system and its innate and adaptive responses. SRCRB4D is a widely expressed secreted protein that contains four SRCR domains. SRCRB4D specifically belongs to group B of the SRCR superfamily. Members of group B contain eight evenly spaced cysteines within their SRCR domains that create an intradomain disulfide-bond pattern.

REFERENCES

1. Resnick, D., et al. 1994. The SRCR superfamily: a family reminiscent of the Ig superfamily. *Trends Biochem. Sci.* 19: 5-8.
2. Hohenester, E., et al. 1999. Crystal structure of a scavenger receptor cysteine-rich domain sheds light on an ancient superfamily. *Nat. Struct. Biol.* 6: 228-232.
3. Pancer, Z. 2000. Dynamic expression of multiple scavenger receptor cysteine-rich genes in coelomocytes of the purple sea urchin. *Proc. Natl. Acad. Sci. USA* 97: 13156-13161.
4. Padilla, O., et al. 2002. Cloning of S4D-SRCRB, a new soluble member of the group B scavenger receptor cysteine-rich family (SRCR-SF) mapping to human chromosome 7q11.23. *Immunogenetics* 54: 621-634.

CHROMOSOMAL LOCATION

Genetic locus: SSC4D (human) mapping to 7q11.23; Ssc4d (mouse) mapping to 5 G2.

SOURCE

SRCRB4D (A-10) is a mouse monoclonal antibody raised against amino acids 527-577 mapping near the C-terminus of SRCRB4D of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SRCRB4D (A-10) is available conjugated to agarose (sc-515760 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515760 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515760 PE), fluorescein (sc-515760 FITC), Alexa Fluor® 488 (sc-515760 AF488), Alexa Fluor® 546 (sc-515760 AF546), Alexa Fluor® 594 (sc-515760 AF594) or Alexa Fluor® 647 (sc-515760 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515760 AF680) or Alexa Fluor® 790 (sc-515760 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

SRCRB4D (A-10) is recommended for detection of SRCRB4D 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SRCRB4D siRNA (h): sc-89707, SRCRB4D siRNA (m): sc-153816, SRCRB4D shRNA Plasmid (h): sc-89707-SH, SRCRB4D shRNA Plasmid (m): sc-153816-SH, SRCRB4D shRNA (h) Lentiviral Particles: sc-89707-V and SRCRB4D shRNA (m) Lentiviral Particles: sc-153816-V.

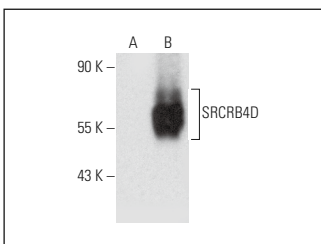
Molecular Weight of SRCRB4D: 56 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or SRCRB4D (h2): 293T Lysate: sc-369431.

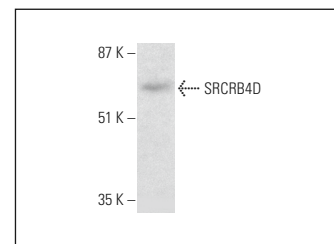
RECOMMENDED SUPPORT REAGENTS

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.

DATA



SRCRB4D (A-10): sc-515760. Western blot analysis of SRCRB4D expression in non-transfected: sc-117752 (A) and human SRCRB4D transfected: sc-369431 (B) 293T whole cell lysates.



SRCRB4D (A-10): sc-515760. Western blot analysis of SRCRB4D expression in Hep G2 whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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