SANTA CRUZ BIOTECHNOLOGY, INC.

CRBP II (8-1#): sc-517437

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The cellular retinol-binding proteins (CRBP I, II, III and IV) belong to a superfamily of small cytoplasmic proteins that interact with hydrophobic ligands. Vitamin A, a molecule essential for cell growth and differentiation, embryonic development and vision, is transported into the cell by the CRBPs in its alcoholic form, called retinol. Both CRBP I and II are composed of ten antiparallel β-strands, which form a β-barrel that contains the retinol molecule, and two α-helices, which cover the open ends of the barrel. CRBP II, which is also known as RBP2 (retinol-binding protein 2), consists of 134 amino acids and is expressed solely in the small intestine where it mediates the absorption of retinoids and carotenoids to biosynthesize retinyl esters.

REFERENCES

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4. Okuno, M., Numaguchi, S., Moriwaki, H. and Muto, Y. 1993. Cellular retinoid-binding proteins. Nippon Rinsho 51: 879-885.
5. Takase, S., Suruga, K. and Goda, T. 2000. Regulation of vitamin A metabolism-related gene expression. Br. J. Nutr. 84: S217-S221.
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CHROMOSOMAL LOCATION

Genetic locus: RBP2 (human) mapping to 3q23.

SOURCE

CRBP II (8-1#) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-134 of CRBP II of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} 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.

APPLICATIONS

CRBP II (8-1#) is recommended for detection of CRBP II 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 CRBP II siRNA (h): sc-78318, CRBP II shRNA Plasmid (h): sc-78318-SH and CRBP II shRNA (h) Lentiviral Particles: sc-78318-V.

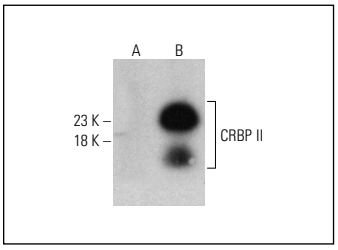
Molecular Weight of CRBP II: 16 kDa.

Positive Controls: CRBP II (h): 293T Lysate: sc-371576.

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



CRBP II (8-1#): sc-517437. Western blot analysis of CRBP II expression in non-transfected: sc-117752 (**A**) and human CRBP II transfected: sc-371576 (**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.