

CRBP II (L-14): sc-102461

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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- Okuno, M., et al. 1993. Cellular retinoid-binding proteins. *Nippon Rinsho* 51: 879-885.
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CHROMOSOMAL LOCATION

Genetic locus: RBP2 (human) mapping to 3q23; Rbp2 (mouse) mapping to 9 E3.3.

SOURCE

CRBP II (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CRBP II of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102461 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 (L-14) is recommended for detection of CRBP II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with family members CRBP I, CRBP III or CRBP IV.

Suitable for use as control antibody for CRBP II siRNA (h): sc-78318, CRBP II siRNA (m): sc-142563, CRBP II shRNA Plasmid (h): sc-78318-SH, CRBP II shRNA Plasmid (m): sc-142563-SH, CRBP II shRNA (h) Lentiviral Particles: sc-78318-V and CRBP II shRNA (m) Lentiviral Particles: sc-142563-V.

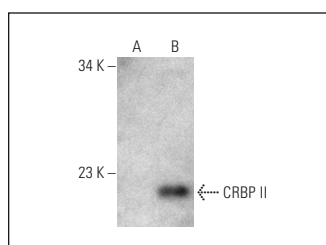
Molecular Weight of CRBP II: 16 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CRBP II (L-14): sc-102461. 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 or our catalog for detailed protocols and support products.