

CRBP III (FL-135): sc-98897

BACKGROUND

The cellular retinol-binding proteins (CRBP I, II, III and IV) belong to a superfamily of small cytoplasmic proteins which 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 I mediates the cellular uptake of retinol, solubilizes and detoxifies it for further transport within the cytoplasm, and presents it to the appropriate enzymes to biosynthesize retinoic acid, an active form of retinol or retinyl esters, which are stored. CRBP I is expressed in human ovary, adrenal and pituitary glands, and testis, and its expression is modulated by TGF β . CRBP II is expressed solely in the small intestine and mediates the absorption of retinoids and carotenoids to biosynthesize retinyl esters. CRBP III and CRBP IV are cytoplasmic proteins that, like CRBP I and CRBP II, form β -barrel structures and participate in the intracellular transport of retinol.

CHROMOSOMAL LOCATION

Genetic locus: RBP5 (human) mapping to 12p13.31

SOURCE

CRBP III (FL-135) is a rabbit polyclonal antibody raised against amino acids 1-135 representing full length CRBP III 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.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

CRBP III (FL-135) is recommended for detection of CRBP III of 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); may cross-react with CRBP I, II and IV.

CRBP III (FL-135) is also recommended for detection of CRBP III in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CRBP III siRNA (h): sc-60440, CRBP III shRNA Plasmid (h): sc-60440-SH and CRBP III shRNA (h) Lentiviral Particles: sc-60440-V.

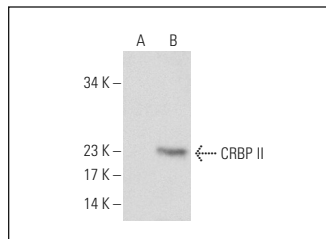
Molecular Weight of CRBP III: 16 kDa.

Positive Controls: CRBP III (h): 293T Lysate: sc-159786.

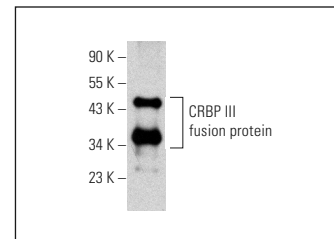
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CRBP III (FL-135): sc-98897. Western blot analysis of CRBP III expression in non-transfected: sc-117752 (A) and human CRBP III transfected: sc-159786 (B) 293T whole cell lysates.



CRBP III (FL-135): sc-98897. Western blot analysis of human recombinant CRBP III fusion protein.

PROTOCOLS

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



Try **CRBP III (A-12): sc-390258**, our highly recommended monoclonal alternative to CRBP III (FL-135).