SANTA CRUZ BIOTECHNOLOGY, INC.

CRABP-II (N-14): sc-10063

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The cellular retinoic acid-binding protein (CRABP)-I and a related isoform, CRABP-II, bind retinoic acid (RA), an important regulator of cell growth and differentiation in fetal and adult tissues. These CRABP proteins mediate the downstream effects of RA in distinct ways. CRABP-I negatively regulates the activity of RA by enhancing the production of RA-metabolizing enzymes and increasing the rate at which RA is degraded. CRABP-II enhances the effects of RA by directly interacting with RA receptors (RAR) and, in turn, promoting the formation of RAR-RA complexes and stimulating RA-mediated gene transcription. Both CRABP-I and CRABP-II are expressed in the embryo, and CRABP-I is ubiquitously expressed in various adult tissues. The expression of CRABP-II is elevated in cells that synthesize relatively large amounts of RA, and it is also predominantly expressed in skin, uterus, ovary and in the choroid plexus.

CHROMOSOMAL LOCATION

Genetic locus: CRABP2 (human) mapping to 1q23.1; Crabp2 (mouse) mapping to 3 F1.

SOURCE

CRABP-II (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CRABP-II of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-10063 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CRABP-II (N-14) is recommended for detection of CRABP-II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CRABP-II (N-14) is also recommended for detection of CRABP-II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CRABP-II siRNA (h): sc-35105, CRABP-II siRNA (m): sc-35106, CRABP-II shRNA Plasmid (h): sc-35105-SH, CRABP-II shRNA Plasmid (m): sc-35106-SH, CRABP-II shRNA (h) Lentiviral Particles: sc-35105-V and CRABP-II shRNA (m) Lentiviral Particles: sc-35106-V.

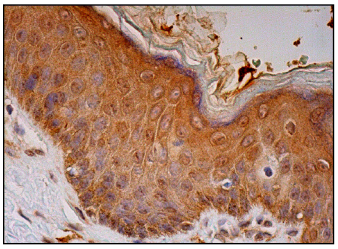
Molecular Weight of CRABP-II: 15 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, NIH/3T3 nuclear extract: sc-2138 or A-431 nuclear extract: sc-2122.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CRABP-II (N-14): sc-10063. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vulva/anal skin tissue showing cytoplasmic and nuclear staining of epidermal cells.

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 or our catalog for detailed protocols and support products.