SANTA CRUZ BIOTECHNOLOGY, INC.

CRABP-I (K-14): sc-10062

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: CRABP1 (human) mapping to 15q25.1; Crabp1 (mouse) mapping to 9 A5.3.

SOURCE

CRABP-I (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CRABP-I 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-10062 P, (100 µg 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

CRABP-I (K-14) is recommended for detection of CRABP-I of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Suitable for use as control antibody for CRABP-I siRNA (h): sc-35103, CRABP-I siRNA (m): sc-35104, CRABP-I shRNA Plasmid (h): sc-35103-SH, CRABP-I shRNA Plasmid (m): sc-35104-SH, CRABP-I shRNA (h) Lentiviral Particles: sc-35103-V and CRABP-I shRNA (m) Lentiviral Particles: sc-35104-V.

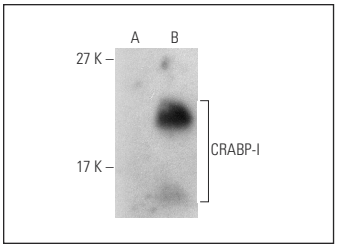
Molecular Weight of CRABP-I: 15 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, CRABP-I (h): 293T Lysate: sc-159411 or A-431 whole cell lysate: sc-2201.

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



CRABP-I (K-14): sc-10062. Western blot analysis of CRABP-I expression in non-transfected: sc-117752 (**A**) and human CRABP-I transfected: sc-159411 (**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.

MONOS Satisfaction Guaranteed

Try **CRABP-I/II (F-9): sc-166897**, our highly recommended monoclonal alternative to CRABP-I (K-14).