CRF-BP (C-20): sc-20315



The Power to Question

BACKGROUND

Response to stress in mammals requires an intact hypothalamic-pituitary-adrenal axis. The proximal part of the response is mediated by secretion of corticotropin-releasing hormone (CRH) by the paraventricular nucleus of the hypothalamus. CRH is a 41 amino acid peptide derived by enzymatic cleavage from a 191 amino acid preprohormone. CRH is produced not only in the hypothalamus but also in peripheral tissues, such as T lymphocytes; it is highly expressed in human placenta. Glucocorticoids stimulate placental CRH synthesis and secretion in primary cultures of human placenta. This stimulation is in contrast to the glucocorticoid suppression of CRH expression in hypothalamus. The gene which encodes CRH maps to human chromosome 8q13. Human plasma contains a CRH-binding protein, CRH-BP (also designated CRF-BP) which inactivates CRH and which may prevent inappropriate pituitary-adrenal stimulation in pregnancy. The gene which encodes CRF-BP maps to human chromosome 5q13.3.

CHROMOSOMAL LOCATION

Genetic locus: CRHBP (human) mapping to 5q13.3; Crhbp (mouse) mapping to 13 D1.

SOURCE

CRF-BP (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CRF-BP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-20315 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CRF-BP (C-20) is recommended for detection of CRF-BP 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).

CRF-BP (C-20) is also recommended for detection of CRF-BP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CRF-BP siRNA (h): sc-39397, CRF-BP siRNA (m): sc-39398, CRF-BP shRNA Plasmid (h): sc-39397-SH, CRF-BP shRNA Plasmid (m): sc-39398-SH, CRF-BP shRNA (h) Lentiviral Particles: sc-39397-V and CRF-BP shRNA (m) Lentiviral Particles: sc-39398-V.

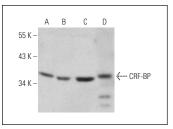
Molecular Weight of CRF-BP: 37 kDa.

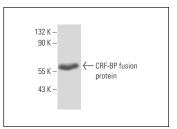
Positive Controls: K-562 whole cell lysate: sc-2203, HEK293 whole cell lysate: sc-45136 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

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





CRF-BP (C-20): sc-20315. Western blot analysis of CRF-BP expression in K-562 (A), HEK293 (B) and NTERA-2 cl.D1 (C) whole cell lysates and human adioose tissue tissue extract (D).

CRF-BP (C-20): sc-20315. Western blot analysis of human recombinant CRF-BP fusion protein.

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.

PROTOCOLS

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



Try **CRF-BP (C-8)**: **sc-365975** or **CRF-BP (G-2)**: **sc-365427**, our highly recommended monoclonal alternatives to CRF-BP (C-20).

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