

CRF-BP (C-8): sc-365975

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 prohormone. 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.

REFERENCES

- Robinson, B.G., et al. 1988. Glucocorticoid stimulates expression of corticotropin-releasing hormone gene in human placenta. *Proc. Natl. Acad. Sci. USA* 85: 5244-5248.
- Arbiser, J.L., et al. 1988. Human corticotropin releasing hormone gene is located on the long arm of chromosome 8. *Cytogenet. Cell Genet.* 47: 113-116.

CHROMOSOMAL LOCATION

Genetic locus: CRHBP (human) mapping to 5q13.3.

SOURCE

CRF-BP (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 299-322 at the C-terminus of CRF-BP of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRF-BP (C-8) is available conjugated to agarose (sc-365975 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365975 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365975 PE), fluorescein (sc-365975 FITC), Alexa Fluor® 488 (sc-365975 AF488), Alexa Fluor® 546 (sc-365975 AF546), Alexa Fluor® 594 (sc-365975 AF594) or Alexa Fluor® 647 (sc-365975 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365975 AF680) or Alexa Fluor® 790 (sc-365975 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365975 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

CRF-BP (C-8) is recommended for detection of CRF-BP of human origin by Western Blotting (starting dilution 1:100, 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), 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).

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

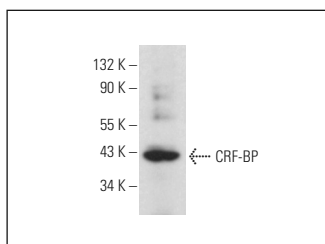
Molecular Weight of CRF-BP: 37 kDa.

Positive Controls: human liver extract: sc-363766.

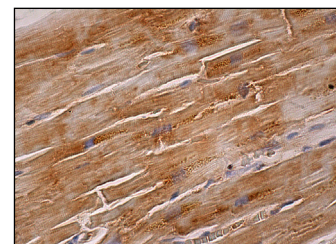
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CRF-BP (C-8): sc-365975. Western blot analysis of CRF-BP expression in human liver tissue extract.



CRF-BP (C-8): sc-365975. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

- Chouridou, E., et al. 2014. A complete corticotropin releasing factor system localized in human fetal lung. *Hormones* 13: 229-243.
- Chouridou, E., et al. 2016. Corticotropin-releasing factor (CRF) system localization in human fetal heart. *Hormones* 15: 55-64.

RESEARCH USE

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