

CRF-BP (C-19): sc-1822

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.

REFERENCES

1. 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.
2. 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.

SOURCE

CRF-BP (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CRF-BP 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-1822 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRF-BP (C-19) is recommended for detection of CRF-BP of 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).

CRF-BP (C-19) is also recommended for detection of CRF-BP in additional species, including bovine and porcine.

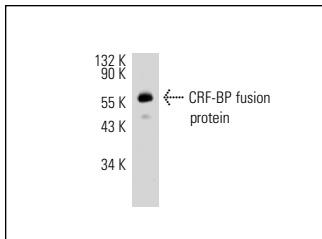
Suitable for use as control antibody for CRF-BP siRNA (h): sc-39397, CRF-BP shRNA Plasmid (h): sc-39397-SH and CRF-BP shRNA (h) Lentiviral Particles: sc-39397-V.

Molecular Weight of CRF-BP: 37 kDa.

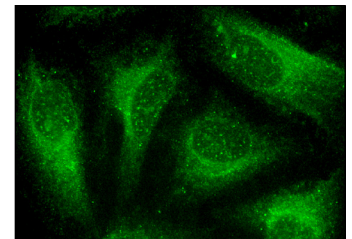
RECOMMENDED SECONDARY REAGENTS

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-19): sc-1822: Western blot analysis of human recombinant CRF-BP fusion protein.



CRF-BP (C-19): sc-1822. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Zouboulis, C.C., et al. 2002. Corticotropin-releasing hormone: an autocrine hormone that promotes lipogenesis in human sebocytes. *Proc. Natl. Acad. Sci. USA* 99: 7148-7153.
2. Klimaviciute, A., et al. 2006. Corticotropin-releasing hormone, its binding protein and receptors in human cervical tissue at preterm and term labor in comparison to non-pregnant state. *Reprod. Biol. Endocrinol.* 4: 29.
3. Xu, J., et al. 2006. Dynamic expression and regulation of the corticotropin-releasing hormone/urocortin-receptor-binding protein system in the primate ovary during the menstrual cycle. *J. Clin. Endocrinol. Metab.* 91: 1544-1553.

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.


 MONOS
Satisfaction
Guaranteed

Try **CRF-BP (C-8): sc-365975** or **CRF-BP (G-2): sc-365427**, our highly recommended monoclonal alternatives to CRF-BP (C-19).