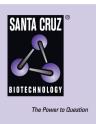
SANTA CRUZ BIOTECHNOLOGY, INC.

CRF-RI (V-14): sc-12381



BACKGROUND

Individuals suffering from Alzheimer's disease (AD) exhibit dramatic reductions in the content of corticotropin-releasing factor (CRF), increased expression of CRF receptors (CRFRs) and abnormalities in neuronal morphology in affected brain areas. In addition, AD patients show decreased concentrations of CRF in their cerebrospinal fluid, which may contribute to their cognitive impairment. A high affinity CRF binding protein, designated CRF-BP, has been discovered in postmortem brain samples from AD patients. CRF-BP serves to bind and inactivate CRF, reducing the pool of "free CRF" available to bind CRFRs. Two CRF receptors, designated CRF-RI and CFR-RII, exhibit distinct brain localizations. Two forms of CFR-RII, designated CFR-RII and CFR-RIB, result from alternative mRNA splicing. Urocortin, an additional member of the CRF family, shares 63% sequence identity with urotensin and 45% sequence identity with CRF. Urocortin specifically binds to and activates CRF-RI and CFR-RII, but binds to CRF-RII more efficiently than CRF, suggesting that it may be the true, high affinity ligand for the CRF receptor type II.

CHROMOSOMAL LOCATION

Genetic locus: CRHR1 (human) mapping to 17q21.31; Crhr1 (mouse) mapping to 11 E1.

SOURCE

CRF-RI (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CRF-RI 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-12381 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRF-RI (V-14) is recommended for detection of all CRF-RI isoforms 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CRF-RI (V-14) is also recommended for detection of all CRF-RI isoforms in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CRF-RI siRNA (h): sc-39914, CRF-RI siRNA (m): sc-39915, CRF-RI shRNA Plasmid (h): sc-39914-SH, CRF-RI shRNA Plasmid (m): sc-39915-SH, CRF-RI shRNA (h) Lentiviral Particles: sc-39914-V and CRF-RI shRNA (m) Lentiviral Particles: sc-39915-V.

Moledular Weight of CRF-RI: 53-66 kDa.

STORAGE

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

SELECT PRODUCT CITATIONS

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- Fan, J.M., et al. 2009. Gestational hypoxia alone or combined with restraint sensitizes the hypothalamic-pituitary-adrenal axis and induces anxiety-like behavior in adult male rat offspring. Neuroscience 159: 1363-1373.
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- Cong, B., et al. 2009. Reduced expression of CRH receptor type 1 in upper segment human myometrium during labour. Reprod. Biol. Endocrinol. 7: 43.
- Xu, C., et al. 2011. CRH acts on CRH-R1 and -R2 to differentially modulate the expression of large-conductance calcium-activated potassium channels in human pregnant myometrium. Endocrinology 152: 4406-4417.

RESEARCH USE

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