SANTA CRUZ BIOTECHNOLOGY, INC.

α_{2C}-AR (C-20)-R: sc-1480-R

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

α_{2C} adrenergic receptors (α_{2C}-AR) regulate neurotransmitter release from sympathetic nerves in the heart, and from adrenergic neurons in the central nervous system. α_{2C}-AR can influence Parkinson's disease, panic disorders, and Huntington disease (HD) progression. A genetic variant in the α_{2C}-AR coding region (Del322-325) renders the receptor partially uncoupled from G_i, and is a contributing risk factor for heart failure. α_{2C}-AR transcripts are present in rat muscle, heart, pancreas, and kidney.

REFERENCES

1. Eason, M.G., et al. 1993. Human α_2-adrenergic receptor subtype distribution: widespread and subtype-selective expression of α-2C10, α-2C4, and α-2C2 mRNA in multiple tissues. Mol. Pharmacol. 44: 70-75.
2. Riess, O., et al. 1994. Precise mapping of the brain α_2-adrenergic receptor gene within chromosome 4p16. Genomics 19: 298-302.

CHROMOSOMAL LOCATION

Genetic locus: ADRA2C (human) mapping to 4p16.3; Adra2c (mouse) mapping to 5 B2.

SOURCE

α_{2C}-AR (C-20)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of α_{2C}-AR 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-1480 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

α_{2C}-AR (C-20)-R is recommended for detection of α_{2C}-AR 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), 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 α_{2C}-AR siRNA (h): sc-29622, α_{2C}-AR siRNA (m): sc-29623, α_{2C}-AR shRNA Plasmid (h): sc-29622-SH, α_{2C}-AR shRNA Plasmid (m): sc-29623-SH, α_{2C}-AR shRNA (h) Lentiviral Particles: sc-29622-V and α_{2C}-AR shRNA (m) Lentiviral Particles: sc-29623-V.

Molecular Weight of α_{2C}-AR: 60 kDa.

Positive Controls: A-10 cell lysate: sc-3806 or KNRK whole cell lysate: sc-2214.

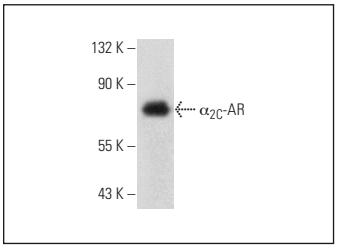
STORAGE

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.

DATA



α_{2C}-AR (C-20)-R: sc-1480-R. Western blot analysis of α_{2C}-AR expression in KNRK whole cell lysate.

SELECT PRODUCT CITATIONS

1. Kanno, N., et al. 2002. Stimulation of α_2-adrenergic receptor inhibits cholangiocarcinoma growth through modulation of Raf-1 and B-Raf activities. Hepatology 35: 1329-1340.
2. Vazquez, S.M., et al. 2006. Human breast cell lines exhibit functional α_2-adrenoceptors. Cancer Chemother. Pharmacol. 58: 50-61.
3. Adeoya-Osiguwa, S.A., et al. 2006. Identification of functional α_2- and β-adrenergic receptors in mammalian spermatozoa. Hum. Reprod. 21: 1555-1563.
4. Francis, H., et al. 2007. The α_2-adrenergic receptor agonist UK 14,304 inhibits secretin-stimulated ductal secretion by downregulation of the cAMP system in bile duct-ligated rats. Am. J. Physiol. Cell Physiol. 293: C1252-C1262.
5. Flierl, M.A., et al. 2007. Phagocyte-derived catecholamines enhance acute inflammatory injury. Nature 449: 721-725.
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