SANTA CRUZ BIOTECHNOLOGY, INC.

α_{1B}-AR (N-20): sc-27136

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

α_{1B}-adrenergic receptors couple to $G_{q/11}$ and induce neoplastic transformation in NIH/3T3 cell transfectants. α_{1B} receptors (α_{1B}-ARs) can form heterooligomers with α_{1A} and α_{1D} receptors. α_{1B}-AR transcripts are abundant in heart, brain and kidney.

REFERENCES

1. Cotecchia, S., et al. 1990. Multiple second messenger pathways of α-adrenergic receptor subtypes expressed in eukaryotic cells. J. Biol. Chem. 265: 63-69.
2. Hausdorff, W.P., et al. 1990. Two kinases mediate agonist-dependent phosphorylation and desensitization of the β2-Adrenergic receptor. Symp. Soc. Exp. Biol. 44: 225-240.

CHROMOSOMAL LOCATION

Genetic locus: ADRA1B (human) mapping to 5q33.3; Adra1b (mouse) mapping to 11 B1.1.

SOURCE

α_{1B}-AR (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of α_{1B}-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-27136 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

α_{1B}-AR (N-20) is recommended for detection of α_{1B}-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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

α_{1B}-AR (N-20) is also recommended for detection of α_{1B}-AR in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for α_{1B}-AR siRNA (h): sc-39860, α_{1B}-AR siRNA (m): sc-39861, α_{1B}-AR shRNA Plasmid (h): sc-39860-SH, α_{1B}-AR shRNA Plasmid (m): sc-39861-SH, α_{1B}-AR shRNA (h) Lentiviral Particles: sc-39860-V and α_{1B}-AR shRNA (m) Lentiviral Particles: sc-39861-V.

Molecular Weight of α_{1B}-AR: 70/90 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, C2C12 whole cell lysate: sc-364188 or rat heart extract: sc-2393.

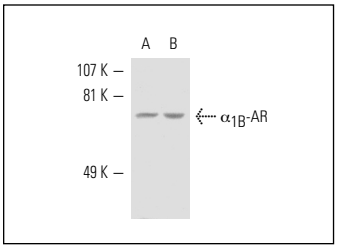
STORAGE

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

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



α_{1B}-AR (N-20): sc-27136. Western blot analysis of α_{1B}-AR expression in SK-N-SH (**A**) and C2C12 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Jia, L., et al. 2003. Androgen receptor activity at the prostate specific antigen locus: steroidal and non-steroidal mechanisms. Mol. Cancer Res. 1: 385-392.
2. Richard M. et al. 2005. Effect of testosterone on the female anterior cruciate ligament. Am. J. Physiol. Regul. Integr. Comp. Physiol. 289: 15-22.
3. Taylor, RA., et al. 2006. 17β-estradiol induces apoptosis in the developing rodent prostate independently of ERα or ERβ. Endocrinology 147: 191-200.
4. O-Uchi, J., et al. 2008. Interaction of α1-adrenoceptor subtypes with different G proteins induces opposite effects on cardiac L-type Ca^{2+} channel. Circ. Res. 102: 1378-1388.

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.