

# $\alpha_{2B}$ -AR (E-20): sc-31353

## BACKGROUND

Alpha<sub>2</sub>-adrenergic receptors are members of the G protein-coupled receptor superfamily. They include 3 highly homologous subtypes: alpha<sub>2A</sub>, alpha<sub>2B</sub>, and alpha<sub>2C</sub>. These receptors have a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system. Alpha<sub>2B</sub>-adrenergic receptors ( $\alpha_{2B}$ -AR) couple to G<sub>i</sub>-protein and induce salt-dependent hypertension in response to catecholamines. The carboxyl-terminal cytoplasmic domain of  $\alpha_{2B}$ -AR can associate with proteins, including the guanine nucleotide exchange factor Eif-2B.  $\alpha_{2B}$ -AR transcripts are abundant in rat liver and kidney.

## REFERENCES

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- Cussac, D., et al. 2002.  $\alpha_{2B}$ -adrenergic receptor activates MAPK via a pathway involving arachidonic acid metabolism, matrix metalloproteinases, and epidermal growth factor receptor transactivation. *J. Biol. Chem.* 277: 19882-19888.
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## CHROMOSOMAL LOCATION

Genetic locus: ADRA2B (human) mapping to 2p13-q13.

## SOURCE

$\alpha_{2B}$ -AR (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of  $\alpha_{2B}$ -AR of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31353 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

$\alpha_{2B}$ -AR (E-20) is recommended for detection of  $\alpha_{2B}$  adrenergic receptor of 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).

Suitable for use as control antibody for  $\alpha_{2B}$ -AR siRNA (h): sc-39864,  $\alpha_{2B}$ -AR shRNA Plasmid (h): sc-39864-SH and  $\alpha_{2B}$ -AR shRNA (h) Lentiviral Particles: sc-39864-V.

Molecular Weight of  $\alpha_{2B}$ -AR: 62 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) 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try  $\alpha_{2B}$ -AR (G-9): sc-390430 or  $\alpha_{2B}$ -AR (C-4): sc-390429, our highly recommended monoclonal alternatives to  $\alpha_{2B}$ -AR (E-20).