## SANTA CRUZ BIOTECHNOLOGY, INC.

# α<sub>2B</sub>-AR (5G10): sc-65211



## BACKGROUND

 $\alpha_2$ -adrenergic receptors are members of the G protein-coupled receptor superfamily. They include 3 highly homologous subtypes:  $\alpha_{2A}, \, \alpha_{2B}$  and  $\alpha_{2C}$ . These receptors have a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system.  $\alpha_{2B}$ -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 Elf-2B.  $\alpha_{2B}$ -AR transcripts are abundant in rat liver and kidney.

#### REFERENCES

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- 2. Huang, L., et al. 1996.  $\alpha_{2B}$ -adrenergic receptors: immunolocalization and regulation by potassium depletion in rat kidney. Am. J. Physiol. 270: F1015-1026.
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- 4. Small, K.M., et al. 2001. Polymorphic deletion of three intracellular acidic residues of the  $\alpha_{2B}$ -adrenergic receptor decreases G protein-coupled receptor kinase-mediated phosphorylation and desensitization. J. Biol. Chem. 276: 4917-4922.
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- 6. Kintsurashvili, E., et al. 2003. Central  $\alpha_{2B}$ -adrenergic receptor antisense in plasmid vector prolongs reversal of salt-dependent hypertension. J. Hypertens. 21: 961-967.
- 7. 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.
- 8. Lin, C.Y., et al. 2003. Conserved motifs in somatostatin, D2-dopamine, and  $\alpha_{2B}$ -adrenergic receptors for inhibiting the Na-H exchanger, NHE1. J. Biol. Chem. 278: 15128-15135.
- 9. Brady, A.E., et al. 2003. Spinophilin stabilizes cell surface expression of  $\alpha_{2B}$ -adrenergic receptors. J. Biol. Chem. 278: 32405-32412.

#### CHROMOSOMAL LOCATION

Genetic locus: Adra2b (mouse) mapping to 2 F1.

#### SOURCE

 $\alpha_{2B}\text{-}AR$  (5G10) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to the internal sequence of the third intracellular loop of  $\alpha_{2B}\text{-}AR$  of rat origin.

## PRODUCT

Each vial contains 100  $\mu g~lg G_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

 $\alpha_{2B}$ -AR (5G10) is recommended for detection of  $\alpha_{2B}$ -AR of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for  $\alpha_{2B}$ -AR siRNA (m): sc-39865,  $\alpha_{2B}$ -AR shRNA Plasmid (m): sc-39865-SH and  $\alpha_{2B}$ -AR shRNA (m) Lentiviral Particles: sc-39865-V.

Molecular Weight of  $\alpha_{2B}$ -AR: 65 kDa.

Positive Controls: MDCK cell lysate: sc-2252.

#### DATA



 $\alpha_{2B}\text{-}AR$  (5G10): sc-65211. Western blot analysis of  $\alpha_{2B}\text{-}AR$  expression in rat  $\alpha_{2B}\text{-}AR$  transfected MDCK whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*D0 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 for detailed protocols and support products.