# $\alpha_{1B}$ -AR (G-16): sc-26416



The Power to Question

#### **BACKGROUND**

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

# **REFERENCES**

- 1. Allen, L.F., Lefkowitz, R.J., Caron, M.G. and Cotecchia, S. 1991. G protein-coupled receptor genes as protooncogenes: constitutively activating mutation of the  $\alpha$ -1B adrenergic receptor enhances mitogenesis and tumorigenicity. Proc. Natl. Acad. Sci. USA 88: 11354-11358.
- 2. Hague, C., Uberti, M.A., Chen, Z., Hall, R.A. and Minneman, K.P. 2004. Cell surface expression of  $\alpha_{1D}$ -adrenergic receptors is controlled by hetero-dimerization with  $\alpha_{1B}$ -adrenergic receptors. J. Biol. Chem. 279: 15541-15549.
- 3. Stanasila, L., Perez, J.B., Vogel, H. and Cotecchia, S. 2003. Oligomerization of the  $\alpha_{1A}$  and  $\alpha_{1B}$ -adrenergic receptor subtypes. Potential implications in receptor internalization. J. Biol. Chem. 278: 40239-40251.

## CHROMOSOMAL LOCATION

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

# **SOURCE**

 $\alpha_{1B}$ -AR (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of  $\alpha_{1B}$ -AR of human origin.

# **PRODUCT**

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

Blocking peptide available for competition studies, sc-26416 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

 $\alpha_{1B}$ -AR (G-16) is recommended for detection of  $\alpha_{1B}$ -AR 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).

 $\alpha_{1B}\text{-AR}$  (G-16) is also recommended for detection of  $\alpha_{1B}\text{-AR}$  in additional species, including canine, bovine, porcine and avian.

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

Molecular Weight of  $\alpha_{1B}$ -AR: 70/90 kDa.

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

#### **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) 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 or our catalog for detailed protocols and support products.

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