

α_{2B} -AR (H-96): sc-10723

BACKGROUND

α_2 -adrenergic receptors are members of the G protein-coupled receptor superfamily. They include three highly homologous subtypes: α_{2A} , α_{2B} and α_{2C} . These receptors have a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system. α_{2B} -adrenergic receptors (α_{2B} -AR) couple to G_i -protein and induce salt-dependent hypertension in response to catecho-lamines. The carboxyl-terminal cytoplasmic domain of α_{2B} -AR can associate with proteins, including the guanine nucleotide exchange factor Elf-2B. α_{2B} -AR transcripts are abundant in rat liver and kidney.

REFERENCES

- Weinshank, R.L., et al. 1990. Cloning, expression, and pharmacological characterization of a human α_{2B} -adrenergic receptor. *Mol. Pharmacol.* 38: 681-688.
- Huang, L., et al. 1996. α_{2B} -adrenergic receptors: immunolocalization and regulation by potassium depletion in rat kidney. *Am. J. Physiol.* 270: F1015-F1026.
- Klein, U., et al. 1997. A novel interaction between adrenergic receptors and the α -subunit of eukaryotic initiation factor 2B. *J. Biol. Chem.* 272: 19099-19102.
- Small, K.M., et al. 2001. Polymorphic deletion of three intracellular acidic residues of the α_{2B} -adrenergic receptor decreases G protein-coupled receptor kinase-mediated phosphorylation and desensitization. *J. Biol. Chem.* 276: 4917-4922.
- Madsen, O., et al. 2002. Molecular evolution of the mammalian α_{2B} adrenergic receptor. *Mol. Biol. Evol.* 19: 2150-2160.
- Cussac, D., et al. 2002. α_{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.
- Kintsurashvili, E., et al. 2003. Central α_{2B} -adrenergic receptor antisense in plasmid vector prolongs reversal of salt-dependent hypertension. *J. Hypertens.* 21: 961-967.

CHROMOSOMAL LOCATION

Genetic locus: ADRA2B (human) mapping to 2q11.1; Adra2b (mouse) mapping to 2 F1.

SOURCE

α_{2B} -AR (H-96) is a rabbit polyclonal antibody raised against amino acids 202-297 of α_{2B} -AR of human origin.

PRODUCT

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

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

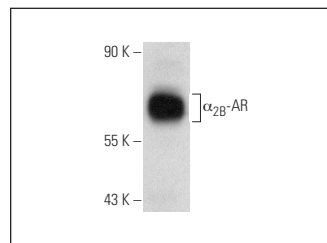
α_{2B} -AR (H-96) is recommended for detection of α_{2B} adrenergic receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for α_{2B} -AR siRNA (h): sc-39864, α_{2B} -AR siRNA (m): sc-39865, α_{2B} -AR shRNA Plasmid (h): sc-39864-SH, α_{2B} -AR shRNA Plasmid (m): sc-39865-SH, α_{2B} -AR shRNA (h) Lentiviral Particles: sc-39864-V and α_{2B} -AR shRNA (m) Lentiviral Particles: sc-39865-V.

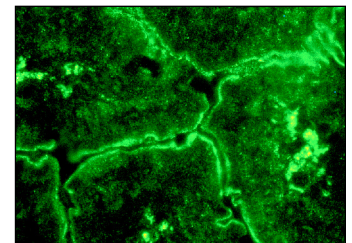
Molecular Weight of α_{2B} -AR: 62 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

DATA



α_{2B} -AR (H-96): sc-10723. Western blot analysis of α_{2B} -AR expression in Hep G2 whole cell lysate.



α_{2B} -AR (H-96): sc-10723. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining.

SELECT PRODUCT CITATIONS

- 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.
- Pradidarcheep, W., et al. 2009. Lack of specificity of commercially available antisera against muscarinic and adrenergic receptors. *Naunyn Schmiedebergs Arch. Pharmacol.* 379: 397-402.
- Bruzzone, A., et al. 2011. α_2 -Adrenoceptors enhance cell proliferation and mammary tumor growth acting through both the stroma and the tumor cells. *Curr. Cancer Drug Targets* 11: 763-774.

STORAGE

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


 MONOS
Satisfaction
Guaranteed

Try α_{2B} -AR (G-9): sc-390430 or α_{2B} -AR (C-4): sc-390429, our highly recommended monoclonal alternatives to α_{2B} -AR (H-96).