



β_3 -AR (H-160): sc-13108

BACKGROUND

β_3 -adrenergic receptors (β_3 -ARs) bind catecholamines (epinephrine, norepinephrine) and primarily regulate lipolysis and thermogenesis in adipose. β_3 -ARs are present in adipose tissues and heart, and in smooth muscle of bladder, colon, small intestine and stomach. The human corpus cavernosum exhibits basal β_3 -AR-mediated vasorelaxant tone and activity is linked to inhibition of the RhoA/Rho-kinase pathway. β_3 -AR interacts directly with the SH3 domain of Src through proline-rich motifs (PXXP) in the third intracellular loop and the carboxyl-terminus.

REFERENCES

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- Gros, J., et al. 1999. Expression of human β_3 -AR induces adipocyte-like features in CHO/K1 fibroblasts. *J. Cell Sci.* 112: 3791-3797.
- Cao, W., et al. 2000. Direct binding of activated c-Src to the β_3 -AR is required for MAP kinase activation. *J. Biol. Chem.* 275: 38131-38134.
- Dixon, T.M., et al. 2001. CCAAT/enhancer-binding protein α is required for transcription of the β_3 -AR gene during adipogenesis. *J. Biol. Chem.* 276: 722-728.
- Steinle, J.J., et al. 2003. β_3 -ARs regulate retinal endothelial cell migration and proliferation. *J. Biol. Chem.* 278: 20681-20586.
- Cirino, G., et al. 2003. Involvement of β_3 -AR activation via cyclic GMP- but not NO-dependent mechanisms in human corpus cavernosum function. *Proc. Natl. Acad. Sci. USA* 100: 5531-5536.
- Hao, K., et al. 2004. β_3 -AR polymorphism and obesity-related phenotypes in hypertensive patients. *Obes. Res.* 12: 125-30.

CHROMOSOMAL LOCATION

Genetic locus: ADRB3 (human) mapping to 8p12.

SOURCE

β_3 -AR (H-160) is a rabbit polyclonal antibody raised against amino acids 354-408 mapping within a C-terminal cytoplasmic domain of β_3 -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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

β_3 -AR (H-160) is recommended for detection of β_3 -AR of 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 β_3 -AR siRNA (h): sc-105010, β_3 -AR shRNA Plasmid (h): sc-105010-SH and β_3 -AR shRNA (h) Lentiviral Particles: sc-105010-V.

Molecular Weight of β_3 -AR: 44 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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