

α_2A -AR (H-150): sc-28983

BACKGROUND

α_2A adrenergic receptors (AR) regulate neurotransmitter release from sympathetic nerves in the heart, and from adrenergic neurons in the central nervous system. α_2A -AR regulates the phosphorylation of microtubule-associated protein 2, which in turn mediates dendrite growth of cortical neurons. α_2A -AR also contributes to feedback inhibition of pain hypersensitivity.

REFERENCES

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3. Song, Z.M., et al. 2004. α_2A adrenoceptors regulate phosphorylation of microtubule-associated protein-2 in cultured cortical neurons. *Neuroscience* 123: 405-18.
4. Mansikka, H., et al. 2004. α_2A -adrenoceptors contribute to feedback inhibition of capsaicin-induced hyperalgesia. *Anesthesiology* 101: 185-90.
5. Ihalainen, J.A., et al. 2004. *In vivo* regulation of dopamine and noradrenaline release by α_2A -adrenoceptors in the mouse nucleus accumbens. *J. Neurochem* 91: 49-56.
6. Ma, D., et al. 2004. Dexmedetomidine produces its neuroprotective effect via the α_2A -adrenoceptor subtype. *Eur. J. Pharmacol* 502: 87-97.
7. Olli-Lahdesmaki, T., et al. 2004. Ligand-induced alpha2-adrenoceptor endocytosis: relationship to Gi protein activation. *Biochem. Biophys. Res. Commun.* 321: 226-233.
8. Shishkina, G.T., et al. 2004. Influence of neonatal short-term reduction in brainstem α_2A -adrenergic receptors on receptor ontogenesis, acoustic startle reflex, and prepulse inhibition in rats. *Behav. Neurosci.* 118: 1285-1292.

SOURCE

α_2A -AR (H-150) is a rabbit polyclonal antibody raised against amino acids 221-370 mapping within a cytoplasmic domain of α_2A -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.

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.

APPLICATIONS

α_2A -AR (H-150) is recommended for detection of α_2A adrenergic receptor, and to a lesser extent, α_2B adrenergic receptor, of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of α_2A -AR: 70 kDa.

Positive Controls: mouse brain extract: sc-2392, rat brain extract: sc-2253 or mouse kidney extract: sc-2255.

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.