



Adenosine A3-R (h2): 293T Lysate: sc-115823

BACKGROUND

Adenosine is involved in a variety of processes, including the synthesis of urea, the anti-inflammatory response and the inhibition of protein synthesis. The adenosine receptors, including Adenosine A1-R, Adenosine A2A-R, Adenosine A2B-R and Adenosine A3-R, are integral membrane proteins that are members of the G protein-coupled receptor family. The A1-R protein mediates ureagenesis in a partially calcium-dependent manner. Adenosine is known to mediate coronary vasodilation via the A2A-R receptor. Collagen synthesis and total protein synthesis are inhibited in certain cells by adenosine, acting via the A2B receptors. Activation of the A3-R receptor inhibits the induction of the cytokine TNF α and blocks the endotoxin CD14 receptor signal transduction pathway.

REFERENCES

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4. Salvatore, C.A., et al. 1993. Molecular cloning and characterization of the human A3 Adenosine receptor. *Proc. Natl. Acad. Sci. USA* 90: 10365-10369.
5. McWhinney, C.D., et al. 1996. Activation of Adenosine A3 receptors on macrophages inhibits tumor necrosis factor α . *Eur. J. Pharmacol.* 310: 209-216.
6. Guinzbarg, R., et al. 1997. Ca²⁺ dependence of the response of three Adenosine type receptors in rat hepatocytes. *Eur. J. Pharmacol.* 340: 243-247.
7. Belardinelli, L., et al. 1998. The A2A adenosine receptor mediates coronary vasodilation. *J. Pharmacol. Exp. Ther.* 284: 1066-1073.
8. Dubey, R.K., et al. 1998. Adenosine inhibits growth of human aortic smooth muscle cells via A2B receptors. *Hypertension* 31: 516-521.

CHROMOSOMAL LOCATION

Genetic locus: ADORA3 (human) mapping to 1p13.2.

PRODUCT

Adenosine A3-R (h2): 293T Lysate represents a lysate of human Adenosine A3-R transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Adenosine A3-R (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Adenosine A3-R antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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