PRODUCT INFORMATION



Adenosine Receptor A_{2A} Monoclonal Antibody (Clone 7F6-G₅-A2)

Item No. 10011454

Overview and Properties

This vial contains 500 µg of affinity-purified monoclonal antibody. Contents:

Synonyms: A₂_ΔR, ADORA2A

Immunogen: Human full length A_{2A}R; the antibody recognizes amino acids 213-220 (SQPLPGER) as

determined by epitope mapping

Cross Reactivity: (+) Human A_{2A}R; other species not tested but the epitope is identical in rodents,

primates, and canines and is expected to work for these samples. (-) A_1R , $A_{2R}R$

Form: Liquid

Storage: -20°C (as supplied)

Stability: ≥3 years

Storage Buffer: PBS, pH 7.2, with 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide

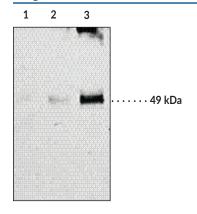
Clone: 7F6-G₅-A2 Host: Mouse Isotype: IgG2a

Applications: Western blot (WB); the recommended starting concentration is 5 µg/ml. Other

applications were not tested, therefore optimal working concentration/dilution

should be determined empirically.

Image



Lane 1: A2AR transfected HEK cell membrane fraction (6.5 µg) Lane 2: A2AR transfected HEK cell membrane fraction (13 µg) Lane 3: A2AR transfected HEK cell membrane fraction (26 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

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Description

 $A_{2A}R$ is a multi-pass membrane protein that is normally localized to the plasma membrane. This receptor is part of the G protein-coupled receptor family that binds adenosine and serves multiple functions. Antagonists of this receptor have been targeted for the treatment of Parkinson's disease. ^{2,3} Early reports found this receptor is found primarily in the brain striatum, but is also found in immune cells and other tissues as well. ² $A_{2A}R$ is comprised of 412 amino acids with an expected molecular weight of 45 kDa. ^{4,5} However multiple glycosylation sites exist that may explain the retarded migration observed by western blotting (45-50 kDa). ¹ This antibody has been extensively characterized and the epitope has been mapped to the third intracellular loop of the receptor. ⁵

References

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- 2. Fredholm, B.B., Chern, Y., Franco, R., et al. Aspects of the general biology of adenosine A_{2A} signaling. *Prog. Neurobiol.* **83(5)**, 263-276 (2007).
- 3. Ledent, C., Vaugeois, J.-M., Schiffmann, S.N., et al. Aggressiveness, hypoalgesia and high blood pressure in mice lacking the adenosine A_{2a} receptor. *Nature* **388(6643)**, 674-678 (1997).
- 4. Robeva, A.S., Woodward, R.L., Jin, X., et al. Molecular characterization of recombinant human adenosine receptors. *Drug Development Research* **39**, 243-252 (1996).
- Rosin, D.L., Robeva, A., Woodward, R.L., et al. Immunohistochemical localization of adenosine A_{2A} receptors in the rat central nervous system. J. Comp. Neurol. 401(2), 1631-186 (1998).

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