Datasheet for ABIN7042883

anti-Adenosine A2a Receptor antibody (AA 201-215)

3 Images

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Overview

Quantity:	25 µL
Target:	Adenosine A2a Receptor (ADORA2A)
Binding Specificity:	AA 201-215
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Adenosine A2a Receptor antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Adenosine A2A Receptor
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)RQLKQMESQPLPGER, corresponding to amino acid residues 201-215 of mouse adenosine A2A receptor
Isotype:	IgG
Specificity:	3rd intracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Rat,human,and canis - identical
Characteristics:	Anti-Adenosine A2A Receptor Antibody (ABIN7042883, ABIN7043888 and ABIN7043889) is a

Product Details

	highly specific antibody directed against an epitope of mouse protein. The antibody can be used in western blot, immunohistochemistry, and immunocytochemistry applications. It has been designed to recognize A2aR from human, rat, and mouse samples.
Purification:	Affinity purified on immobilized antigen.
Grade:	KO Validated

Target Details

Target:	Adenosine A2a Receptor (ADORA2A)
Alternative Name:	ADORA2A (ADORA2A Products)
Background:	ADORA2A, A2AAR, Adenosine A2aR,Adenosine is an endogenous nucleoside generated locally in tissues under conditions of hypoxia, ischemia, or inflammation. It modulates a variety of physiological functions in many tissues including the brain and heart.1,2 Adenosine exerts its actions via four specific adenosine receptors (also named P1 purinergic receptors): Adenosine A1 Receptor (A1AR), Adenosine A2A Receptor (A2AAR), Adenosine A2B Receptor (A2BAR), and Adenosine A3 Receptor (A3AR). All are integral membrane proteins and are members of the G protein-coupled receptor superfamily. They share a common structure of seven putative transmembrane domains, an extracellular -NH2 terminus, cytoplasmic -COOH terminus, and a third intracellular loop important for binding G proteins.1-3 The adenosine receptors can be distinguished on the basis of their differential selectivity for adenosine analogs.1-3Adenosine receptors control neurotransmitter release through the facilitatory A2AAR and the inhibitory A1AR.4 A2AAR and A1AR are the major adenosine receptor subtypes expressed in the central nervous system (CNS). A2AAR is mainly expressed in the striatum on GABAergic striatopallidal neurons, while A1AR is widely distributed throughout the CNS.5,6A2AAR was suggested to play a critical role in attenuation of systemic inflammatory responses and prevention of extensive tissue damage.7 It was suggested that extracellular adenosine that accumulates in inflamed and damaged tissue may activate the A2AAR expressed in immune cells leading to termination/inhibition of the immune response.7 It was further suggested that this same mechanism may protect tumors from antitumor T cells through an immunosuppressive signal generated by the activation of A2AAR on T cells by extracellular adenosine produced from hypoxic cancerous tissues.8 Alternative names: Adenosine A2A Receptor, ADORA2a, A2AAR, Adenosine A2aR
Gene ID:	11540

Target Details

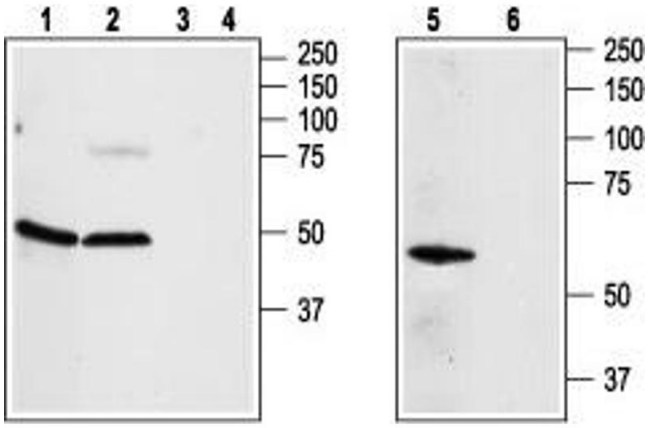
NCBI Accession:	NM_000675
UniProt:	Q60613
Pathways:	Neurotrophin Signaling Pathway, cAMP Metabolic Process, Synaptic Membrane, Feeding Behaviour, Cancer Immune Checkpoints

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:50 Application Dilutions Western blot wb: 1:200
Comment:	Cited Application: IP|IHC Negative Control: (ABIN7234626) Blocking Peptide: (ABIN7234626)
Restrictions:	For Research Use only

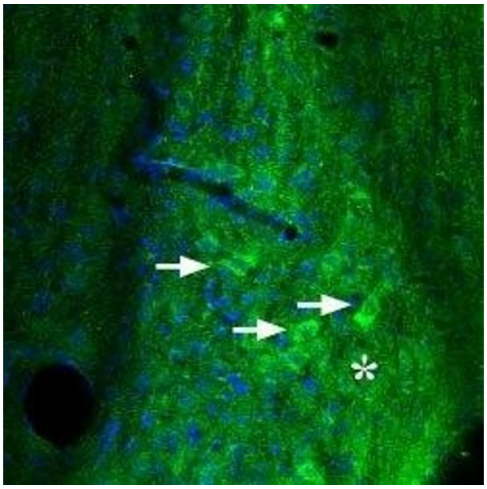
Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



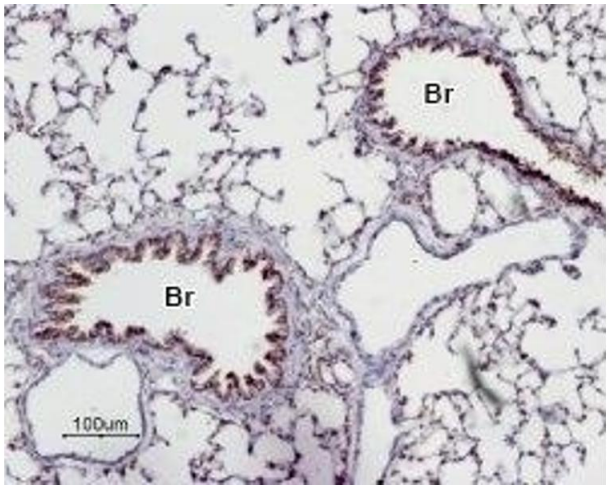
Western Blotting

Image 1. Western blot analysis of rat aortic endothelial cells (lanes 1, 3), rat brain (lanes 2, 4) and Jurkat (lanes 5, 6) lysates: - 1,2,5. Anti-Adenosine A2A Receptor Antibody (ABIN7042883, ABIN7043888 and ABIN7043889), (1:200).3,4,6. Anti-Adenosine A2A Receptor Antibody, preincubated with Adenosine A2A Receptor Blocking Peptide (#BLP-AR002).



Immunohistochemistry

Image 2. Expression of Adenosine A2A Receptor in mouse diagonal band - Immunohistochemical staining of mouse diagonal band using Anti-Adenosine A2A Receptor Antibody (ABIN7042883, ABIN7043888 and ABIN7043889). A2aR (green) appears in the broca of individual neurons (arrows) and in neuropil (asterisk). DAPI is used as the counterstain.



Immunohistochemistry

Image 3. Expression of Adenosine A2A Receptor in rat lung - Immunohistochemical staining of paraffin emedded rat lung sections using Anti-Adenosine A2A Receptor Antibody (ABIN7042883, ABIN7043888 and ABIN7043889), (1:50). A2aR is expressed in the respiratory epithelium of the bronchioli (Br). Note that smooth muscle and endothelium in blood vessels are negative. Hematoxilin is used as the counterstain.