Anti-Adenosine receptor A2a Antibody

Alternative Names: A2aR, ADORA2, ADORA2A, RDC8

Catalogue Number: AB18-10067-50ug

Size: 50 µg

Background Information

Adenosine receptor A2a (ADORA2A) is a member of the G protein-coupled receptor (GPCR) family. The crystallographic structure of the adenosine A2A receptor has shown the presence of a ligand binding pocket distinct from other GPCRs of known structure (beta-2 adrenergic receptor and rhodopsin).[1] Additionally ADORA2A has a secondary sodium-ion binding pocket [2].
A1 and A2A receptors are likely to regulate myocardial oxygen demand and increase coronary circulation by vasodilation. In addition, A2A receptor can suppress immune cells, protecting tissue from inflammation. The A2A receptor is also expressed in the brain, where it has important roles in the regulation of dopamine and glutamate release. This makes it a potential therapeutic target for depression, and Parkinson's disease.

Product Information

Antibody Type:	Polyclonal	**Host:**	Rabbit
Isotype:	IgG	**Species Reactivity:**	Human, Mouse, Rat
Immunogen:	A synthetic peptide from the N-terminal region of human ADORA2A		
Format:	50 µg in 50 µl PBS containing 0.02% sodium azide.		
Storage Conditions:	6 months: 4˚C. Long-term storage: -20˚C. Avoid multiple freeze and thaw cycles.		
Applications:	WB WB 1:500-1000.		

Additional Information

Subcellular location:	Cell membrane, Multi-pass membrane protein	**MW:**	45kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	135	**Uniprot ID:**	P29274

References

1. Veli-Pekka Jaakola et al The 2.6 Angstrom Crystal Structure of a Human A2A Adenosine Receptor Bound to an Antagonist. Science 21 Nov 2008: Vol. 322, Issue 5905, pp. 1211-1217.
2. Liu W, Chun E, Thompson AA, Chubukov P, Xu F, Katritch V, et al. Structural basis for allosteric regulation of GPCRs by sodium ions. Science. 337 (6091): 232–6 July 2012.