

## Product datasheet for **TA328605**

### Adenosine A2b Receptor (ADORA2B) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide KDSATNN*STEPWDGTTNESC, corresponding to amino acid residues 147-166 of human A2B Adenosine Receptor with replacement of cysteine 154 (C154) with serine (*S). 2nd extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.75mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	adenosine A2b receptor
Database Link:	<a href="#">NP_000667</a> <a href="#">Entrez Gene 11541 Mouse</a> <a href="#">Entrez Gene 29316 Rat</a> <a href="#">Entrez Gene 136 Human</a> <a href="#">P29275</a>



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**Background:**

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 brain and heart. Adenosine exerts its action via four specific adenosine receptors (also named P1 purinergic receptors): A1-Adenosine Receptor (A1AR), A2A-Adenosine Receptor (A2AAR), A2B-Adenosine Receptor (A2BAR), and A3-Adenosine Receptor (A3AR). All are integral membrane proteins and members of the G Protein-Coupled Receptor superfamily. They share a common structure of seven putative transmembrane domains, an extracellular amino terminus, a cytoplasmic carboxyl terminus, and a third intracellular loop that is important in binding G proteins. The various adenosine receptors can be distinguished on the basis of their distinct molecular structures, distinct tissue distributions, and differential selectivity for adenosine analogs. The A2 Adenosine receptor subtype was subdivided according to affinity for adenosine; A2AAR has high affinity and A2BAR has low affinity. A2BAR is expressed in mast cells, neutrophils, monocytes, macrophages, dendritic cells, T cells, bronchial epithelium, intestinal epithelium, smooth muscle, brain, and other cells. In intestinal epithelia, A2BAR was found to be the major adenosine receptor subtype expressed and is thought to be involved in diarrheal diseases. It is also believed to be involved in the pathogenesis of chronic airway inflammatory diseases. Thus, antagonists of A2BAR might be effective for the treatment of inflammatory gastrointestinal tract disorders as well as asthma and chronic obstructive pulmonary disease.

**Synonyms:**

ADORA2

**Note:**

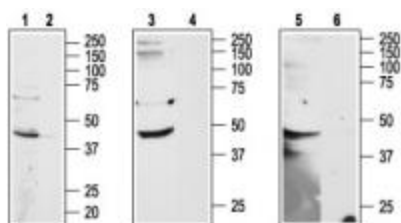
Storage before reconstitution: lyophilized powder can be stored at room temperature for several weeks. For longer periods, store at -20C. Storage after reconstitution: The reconstituted solution can be stored at 4C for up to 2 weeks. For longer periods, small aliquots should be stored at -20C or below. Avoid multiple freezing and thawing. The further dilution should be made using a carrier protein such as BSA (1%). Centrifuge all antibody preparation before use (10000xg 5 min).

**Protein Families:**

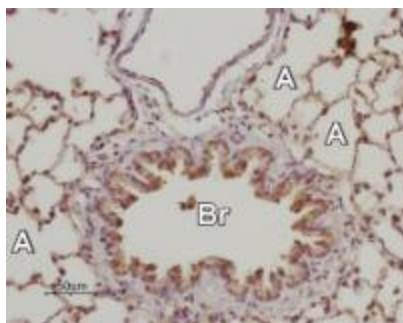
Druggable Genome, GPCR, Transmembrane

**Protein Pathways:**

Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction

**Product images:**

Western blot analysis of HL-60 (lanes 1 and 2) cell line, rat brain (lanes 3 and 4) and mouse brain (lanes 5 and 6) lysates: 1, 3, 5. Anti-A2B Adenosine Receptor (extracellular) antibody, (1:200). 2, 4, 6. Anti-A2B Adenosine Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of A2B Adenosine Receptor in rat lung. Immunohistochemical staining of rat lung paraffin embedded sections using Anti-A2B Adenosine receptor (extracellular) antibody, (1:50). Staining is present in the respiratory epithelium of the bronchiole (Br) as well as in the pneumonocytes of the alveolar wall (alveoli, (A)). Color reaction was obtained with SuperPicture HRP-conjugated polymer (Zymed) followed by DAB. Hematoxylin is used as the counterstain.