



Recombinant Version of Classic Clone

**Cat nr AE00318**

**Product Datasheet**

Mouse Recombinant Antibody, rIgG2838 to:

## ADORA2A, Adenosine A2a Receptor

A2A Adenosine Receptor; Adenosine A2A Receptor; Adenosine receptor A2a; A2AAR; A2aR; RDC8; ADORA2

Cellular localization                      plasma membrane

Official Symbol (Gene)                      ADORA2A

GenelD    135

SwissProt    P29274

Confirmed Applications	Blocking, SPR
Positive controls	In vitro binding assays, receptor inactivation
Aeonian Rating©	95

Purification                                      By Protein A from bioreactor concentrate

Formulation                                       1 mg IgG/ml in PBS with 0.02% Proclin 300

Amount     200ug                       1000ug

Isotype    Mouse IgG1, kappa, recombinant version of clone IgG2838

Confirmed species reactivity                      Human

Immunogen    Human recombinant A2A-adenosine receptor with antagonist ZM241385 bound to it.

Epitope    Intracellular domains of the receptor, away from the ligand binding site, aa33-42 + aa224-235 (Fig 2, Hino et al).

Storage instructions                              Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration    Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty    This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

Liability    This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance                              see next pages

## Product data:

### Immunoassays

#### Surface Plasmon Resonance (SPR):

The Fab generated from the original clone Ig2838 was successfully used in binding assays (BIAcore T100 system) onto the A2A adenosine receptor.

Hino T, Arakawa T, Iwanari H, Yurugi-Kobayashi T, Ikeda-Suno C, Nakada-Nakura Y, Kusano-Arai O, Weyand S, Shimamura T, Nomura N, Cameron AD, Kobayashi T, Hamakubo T, Iwata S, Murata T. G-protein-coupled receptor inactivation by an allosteric inverse-agonist antibody. *Nature*. 2012 Jan 29;482(7384):237-40. doi: 10.1038/nature10750. PMID: 22286059.

### Biological activity

#### Blocking the receptor:

**The Fab generated from the original clone Ig2838 was successfully used to lock the A2A adenosine receptor in an inactive conformation.**

Hino T, Arakawa T, Iwanari H, Yurugi-Kobayashi T, Ikeda-Suno C, Nakada-Nakura Y, Kusano-Arai O, Weyand S, Shimamura T, Nomura N, Cameron AD, Kobayashi T, Hamakubo T, Iwata S, Murata T. G-protein-coupled receptor inactivation by an allosteric inverse-agonist antibody. *Nature*. 2012 Jan 29;482(7384):237-40. doi: 10.1038/nature10750. PMID: 22286059.