

## **PRODUCT INFORMATION**

ADORA2A **Target** 

**Synonyms** A2aR; ADORA2; RDC8

Human ADORA2A full length protein membrane **Description** 

nanoparticles (MNPs)

Delivery In Stock **Uniprot ID** P29274 **Expression Host HEK293 Protein Families GPCR** 

Calcium signaling pathway, Neuroactive ligandreceptor interaction, Vascular smooth muscle **Protein Pathways** 

contraction

The human full length ADORA2A protein has a MW of  $44.7~\mathrm{kDa}$ **Molecular Weight** 

Lyophilized from sterile PBS, pH 7.4. Normally 5 %Formulation & - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis Reconstitution

for specific instructions of reconstitution. Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not

intended for use within a month, aliquot and store Storage & Shipping at -80°C (Avoid repeated freezing and thawing).

Lyophilized proteins are shipped at ambient

témperature.

A member of the guanine nucleotide-binding protein (G protein)-coupled receptor (GPCR) superfamily, which is subdivided into classes and subtypes. The receptors are seven-pass transmembrane proteins that respond to

extracellular cues and activate intracellular signal

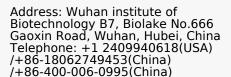
transduction pathways. This protein, an adenosine receptor of A2A subtype, uses adenosine as the preferred endogenous agonist and preferentially interacts with the G(s) and G(olf) family of G proteins to increase intracellular

cAMP levels. It plays an important role in many biological functions, such as cardiac rhythm and circulation, cerebral and renal blood flow, immune function, pain regulation, and sleep. It has been implicated in pathophysiological conditions such as inflammatory diseases and neurodegenerative disorders. Alternative splicing results in multiple transcript variants. A read-through transcript composed of the upstream SPECC1L (sperm

antigen with calponin homology and coiled-coil domains 1-like) and ADORA2A (adenosine A2a receptor) gene sequence has been identified, but it is thought to be non-coding.

Usage Research use only Conjugate Unconjugated

> Email: info@dimabio.com Website: www.dimabio.com



**Background** 





## ELISA assay to evaluate ADORA2A-MNPs 0.5µg Human ADORA2A-MNPs per well

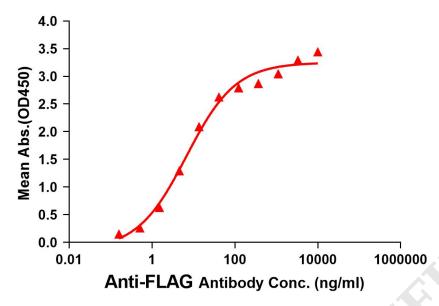


Figure 1. Elisa plates were pre-coated with 0.5µg/per well purified human ADORA2A full length membrane nanoparticles. Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with ADORA2A full length membrane nanoparticles is 6.796ng/ml.

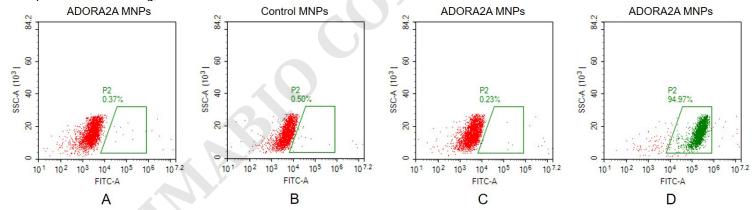


Figure 2. FACS analysis of ADORA2A MNPs A. Negative Control 1: ADORA2A full length membrane nanoparticles samples were stained only with Goat anti-mouse  $\lg G$  488 secondary antibody. B. Negative Control 2: Control membrane nanoparticles samples were stained with anti-ADORA2A antibody (R&D systems, MAB9497R) at  $2\mu g/mL$ , followed by Goat anti-mouse  $\lg G$  488 secondary antibody. C. Negative Control 3: ADORA2A full length membrane nanoparticles samples were stained with anti-His antibody (an irrelevant antibody) at  $2\mu g/mL$ , followed by Goat anti-mouse  $\lg G$  488 secondary antibody. D. ADORA2A full length membrane nanoparticles samples were stained with anti-ADORA2A antibody (R&D systems, MAB9497R) at  $2\mu g/mL$ , followed by Goat anti-mouse  $\lg G$  488 secondary antibody.

Email: info@dimabio.com

Website: www.dimabio.com

