Nanodisc Human ADORA2A-Strep Protein



HDFP767

Product Information

Product SKU: HDFP767 Expression Host: HEK293 Size: 10μg

Target: ADORA2A Tag: C-Flag&Strep Tag

Additional Information

Conjugate: Unconjugated **Uniprot ID**: P29274

Molecular Weight: The human full length ADORA2A-Strep protein has a MW of 44.7 kDa

Protein Information

Background: 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.

Synonyms: A2aR; ADORA2; RDC8

Protein Description: Human ADORA2A-Strep full length protein-synthetic nanodisc

Formulation: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH

8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please

see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater

than 5 mM) in subsequent experiments.

Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular

smooth muscle contraction.

Protein Families: GPCR.

Usage: Research use only

Storage & Shipping: 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 at -80°C (Avoid repeated freezing

and thawing). Lyophilized proteins are shipped at ambient temperature.