

# Datasheet for ABIN7538120

### **ADORA1 Protein**



#### Overview

Quantity:	50 μg
Target:	ADORA1
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

### **Product Details**

Purpose:	Human AA1R full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc
	can be prepared directly from the cells. The polymers used during this process have a dual
	function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to
	form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can
	then be purified.

### **Target Details**

Target:	ADORA1
Alternative Name:	AA1R (ADORA1 Products)
Background:	The protein encoded by this gene is an adenosine receptor that belongs to the G-protein coupled receptor 1 family. There are 3 types of adenosine receptors, each with a specific pattern of ligand binding and tissue distribution, and together they regulate a diverse set of physiologic functions. The type A1 receptors inhibit adenylyl cyclase, and play a role in the fertilization process. Animal studies also suggest a role for A1 receptors in kidney function and

# **Target Details**

	ethanol intoxication. Transcript variants with alternative splicing in the 5' UTR have been found for this gene. [provided by RefSeq, Jul 2008]
Molecular Weight:	The human full length AA1R protein has a MW of 36.5kDa
UniProt:	P30542
Pathways:	EGFR Signaling Pathway, Negative Regulation of Hormone Secretion, Synaptic Membrane

Patriways.	EGER Signaling Patriway, Negative Regulation of Hormone Secretion, Synaptic Membrane
Application Detail	ls
Comment:	Advantages of Synthetic Nanodiscs:
	Highly purified membrane proteins
	High solubility in aqueous solutions
	High stability
	<ul> <li>Proteins are in a native membrane environment and remain biologically active</li> </ul>
	<ul> <li>No detergent and can be used for cell-based assays</li> </ul>
	No MSP backbone proteins
	Limitations of Synthetic Nanodiscs:
	Intolerant to acids and high concentrations of divalent metal ions

Restrictions:

For Research Use only

# Handling

Format:	Lyophilized
Buffer:	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.
Storage:	-20 °C,-80 °C
Storage Comment:	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.
Expiry Date:	12 months