

# Datasheet for ABIN7538122

# **Adenosine A3 Receptor Protein (ADORA3)**



### Overview

Quantity:	50 µg
Target:	Adenosine A3 Receptor (ADORA3)
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

# **Product Details**

Purpose:	Human AA3R 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:	Adenosine A3 Receptor (ADORA3)
Alternative Name:	AA3R (ADORA3 Products)
Background:	This gene encodes a protein that belongs to the family of adenosine receptors, which are G- protein-coupled receptors that are involved in a variety of intracellular signaling pathways and physiological functions. The receptor encoded by this gene mediates a sustained cardioprotective function during cardiac ischemia, it is involved in the inhibition of neutrophil degranulation in neutrophil-mediated tissue injury, it has been implicated in both

	neuroprotective and neurodegenerative effects, and it may also mediate both cell proliferation and cell death. Alternative splicing results in multiple transcript variants. This gene shares its 5' terminal exon with some transcripts from overlapping GenelD:57413, which encodes an immunoglobulin domain-containing protein. [provided by RefSeq, Nov 2014]
Molecular Weight:	The human full length AA3R protein has a MW of 36.2kDa
UniProt:	P0DMS8
Pathways:	Hormone Transport, cAMP Metabolic Process, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

### **Application Details**

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Advantages of Synthetic Nanodiscs:

- · Highly purified membrane proteins
- · High solubility in aqueous solutions
- High stability
- · Proteins are in a native membrane environment and remain biologically active
- · No detergent and can be used for cell-based assays
- 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