

Certificate of Analysis

Print Date: Jan 15th 2016 **WWW.tocris.com**

Product Name: SDZ WAG 994 Catalog No.: 2465 Batch No.: 1

CAS Number: 130714-47-5

IUPAC Name: N-Cyclohexyl-2'-O-methyladenosine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{25}N_5O_4$. $^{1/2}H_2O$

Batch Molecular Weight: 372.42 **Physical Appearance:** White solid

Solubility: 1.1eq. NaOH to 100 mM

DMSO to 100 mM ethanol to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.5$ (Dichloromethane:Methanol [9:1])

Melting Point:

HPLC:

Shows >99.1% purity

HNMR:

Consistent with structure

Mass Spectrum:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.83 7.04 18.8 Found 54.5 6.86 18.68



Product Information

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Description:

Potent and selective A_1 adenosine receptor agonist (K_i values are 23, > 10000 and 25000 nM for A_1 , A_{2A} and A_{2B} receptors respectively). Causes a sustained fall in blood pressure and heart rate in spontaneous hypertensive rats and inhibits adenosine deaminase-stimulated lipolysis in rat adipocytes ($K_i = 8$ nM).

Physical and Chemical Properties:

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Batch Molecular Weight: 372.42 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

1.1eq. NaOH to 100 mM DMSO to 100 mM ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Wagner et al (1995) General pharmacology of SDZ WAG 994, a potent selective and orally active adenosine A₁ receptor agonist. Drug Dev.Res. **34** 276.

Ishikawa *et al* (1998) Hypoglycemic and hypotensive effects of 6-cyclohexyl-2'-O-methyl-adenosine, an adenosine A₁ receptor agonist, in spontaneous hypertensive rat complicated with hyperglycemia. Diabetes Res.Clin.Pract. **39** 3. PMID: 9597368.

Jacobson and Gao (2006) Adenosine receptors as therapeutic targets. Nat.Rev.Drug Discov. 5 247. PMID: 16518376.