

Certificate of Analysis

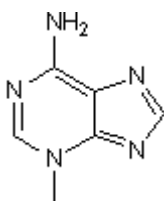
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Product Name: 3-Methyladenine
CAS Number: 5142-23-4
IUPAC Name: 3-Methyl-3*H*-purin-6-amine

Catalog No.: 3977
Batch No.: 6
EC Number: 225-908-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆H₇N₅·0.1H₂O
Batch Molecular Weight: 150.95
Physical Appearance: White solid
Solubility: DMSO to 20 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	47.74	4.81	46.39
Found	47.97	4.73	46.33

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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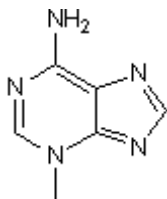
IUPAC Name: 3-Methyl-3*H*-purin-6-amine**Description:**

Inhibitor of class III phosphatidylinositol 3-kinase (PI 3-kinase); also inhibits the autophagic sequestration of cell proteins in rat hepatocytes. Blocks apoptosis in cerebellar granule cells (CGCs) following serum and potassium deprivation.

Physical and Chemical Properties:Batch Molecular Formula: C₆H₇N₅·0.1H₂O

Batch Molecular Weight: 150.95

Physical Appearance: White solid

Minimum Purity: >99%**Batch Molecular Structure:****References:**

Canu et al (2005) Role of the autophagic-lysosomal system on low potassium-induced apoptosis in cultured cerebellar granule cells. *J.Neurochem.* **92** 1228. PMID: 15715672.

Blommaert et al (1997) The phosphatidylinositol 3-kinase inhibitors wortmannin and LY294002 inhibit autophagy in isolated rat hepatocytes. *Eur.J.Biochem.* **243** 240. PMID: 9030745.

Seglen and Gordon (1982) 3-methyladenine: specific inhibitor of autophagic/lysosomal protein degradation in isolated rat hepatocytes. *Proc.Natl.Acad.Sci. USA* **79** 1889.

Storage: Store at +4°C**Solubility & Usage Info:**

DMSO to 20 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.

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