

Certificate of Analysis

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Product Name: Adenine

Catalog No.: 4202

Batch No.: 1

CAS Number: 2922-28-3

IUPAC Name: 6-Aminopurine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅H₅N₅.HCl.½H₂O

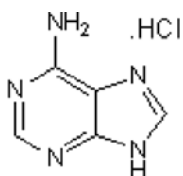
Batch Molecular Weight: 180.6

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	33.25	3.91	38.78
Found	33.43	3.92	38.91

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

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Tel: +1 612 379 2956

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Catalog No.: 4202

Batch No.: 1

CAS Number: 2922-28-3

IUPAC Name: 6-Aminopurine hydrochloride

Description:

High affinity adenine receptor agonist ($K_i = 18$ nM at rat adenine receptor). Inhibits forskolin-stimulated cAMP formation in CHO cells transfected with the adenine receptor; also stimulates GTPγS binding (pEC_{50} values are 8.54 and 7.21 respectively).

Physical and Chemical Properties:

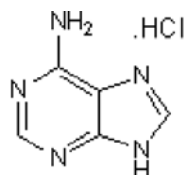
Batch Molecular Formula: $C_5H_5N_5 \cdot HCl \cdot \frac{1}{2}H_2O$

Batch Molecular Weight: 180.6

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO 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:

Gorzalka et al (2005) Evidence for the functional expression and pharmacological characterization of adenine receptors in native cells and tissues. *Mol.Pharmacol.* **67** 955. PMID: 15604413.

Bender et al (2002) Characterization of an orphan G protein-coupled receptor localized in the dorsal root ganglia reveals adenine as a signaling molecule. *Proc.Natl.Acad.Sci.* **99** 8573.

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