

Certificate of Analysis

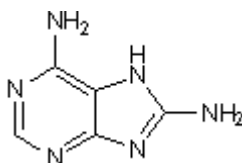
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Product Name: 8-Aminoadenine
CAS Number: 28128-33-8
IUPAC Name: 9H-Purine-6,8-diamine

Catalog No.: 4050 **Batch No.:** 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₅H₆N₆
Batch Molecular Weight: 150.14
Physical Appearance: Off-white solid
Solubility: 2eq.HCl to 100 mM
 DMSO to 50 mM
Storage: Store at +4°C
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	40	4.03	55.97
Found	40.18	3.79	56.25

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

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CAS Number: 28128-33-8
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Description:

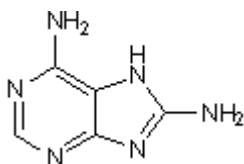
Adenine receptor agonist ($K_i = 0.0341 \mu\text{M}$ in HEK293 cells expressing an adenine binding site). Displays 190-fold increased potency at the human binding site over the rat adenine receptor (rAde1R) ($K_i = 6.51 \mu\text{M}$).

Physical and Chemical Properties:

Batch Molecular Formula: $\text{C}_5\text{H}_6\text{N}_6$
 Batch Molecular Weight: 150.14
 Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

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.

Borrmann et al (2009) Structure-activity relationships of adenine and deazaadenine derivatives as ligands for adenine receptors, a new purinergic receptor family. *J.Med.Chem.* **52** 5974. PMID: 19731917.

Storage: Store at +4°C

Solubility & Usage Info:

2eq.HCl to 100 mM
 DMSO to 50 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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bio-techne.com
 info@bio-techne.com
 techsupport@bio-techne.com

North America
 Tel: (800) 343 7475

China
 info.cn@bio-techne.com
 Tel: +86 (21) 52380373

Europe Middle East Africa
 Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
 Tel:+1 612 379 2956