

# Certificate of Analysis

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**Product Name:** NITD 008

**Catalog No.:** 6045

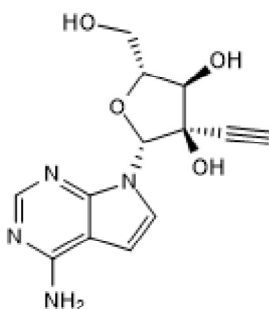
**Batch No.:** 2

**CAS Number:** 1044589-82-3

**IUPAC Name:** 7-(2-C-Ethynyl-β-D-ribofuranosyl)-7H-pyrrolo[2,3-d]pyrimidin-4-amine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>13</sub>H<sub>14</sub>N<sub>4</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 290.27  
**Physical Appearance:** Light brown solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 97.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

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

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**Description:**

NITD 008 is a selective flavivirus inhibitor. Adenosine analog. Inhibits dengue virus ( $EC_{50} = 0.64 \mu M$ ), hepatitis C virus and cellular entry of Zika virus. Reduces increases of cytokines and NS1 and prevents death in dengue-infected mice. Active in vivo. Orally bioavailable.

**Physical and Chemical Properties:**

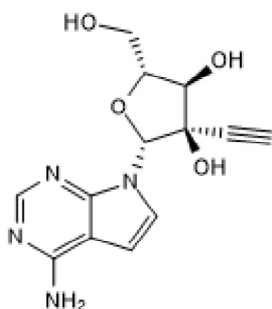
Batch Molecular Formula:  $C_{13}H_{14}N_4O_4$

Batch Molecular Weight: 290.27

Physical Appearance: Light brown solid

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 20 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**Barrows et al** (2016) A screen of FDA-approved drugs for inhibitors of Zika virus infection. *Cell.Host.Microbe*. **20** 259. PMID: 27476412.  
**Yin et al** (2009) An adenosine nucleoside inhibitor of dengue virus. *Proc.Natl.Acad.Sci.USA*. **106** 20435. PMID: 19918064.

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