



# **Certificate of Analysis**

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Product Name: 5-Ethynyluridine Catalog No.: 7206 Batch No.: 1

CAS Number: 69075-42-9

IUPAC Name: 1-((2R,3R,4S,5R)-3,4-Dihydroxy-5-(hydroxymethyl)tetrahydrofuran-2-yl)-5-ethynylpyrimidine-2,4(1H,3H)-dione

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{11}H_{12}N_2O_6$ .Batch Molecular Weight:268.23Physical Appearance:Blue solid

**Solubility:** Please refer to Solubility & Usage Information on Product Information sheet.

Storage: Store at -20°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**HPLC:** Shows 99.2% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 49.26 4.51 10.44 Found 49.36 4.55 10.49

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



# **Product Information**

Print Date: Jan 10th 2022

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# **Description:**

5-Ethynyluridine is a cell-permeable uridine analog. 5-Ethynyluridine can be used in vitro and in vivo to label newly synthesized RNA. 5-Ethynyluridine can be used to study changes in transcription.

## **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{11}H_{12}N_2O_6$ . Batch Molecular Weight: 268.23 Physical Appearance: Blue solid

Minimum Purity: ≥98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

# Solubility & Usage Info:

water to 50 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:

Van't Sant et al (2021) In vivo 5-ethynyluridine (EU) labelling detects reduced transcription in Purkinje cell degeneration mouse mutants, but can itself induce neurodegeneration. Acta Neuropathol.Commun. 9 94. PMID: 34020718.

Nainar et al (2020) An optimized chemical-genetic method for cell-specific metabolic labeling of RNA. Nat.Methods 17 311. PMID: 32015544.

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