

# **Certificate of Analysis**

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Product Name: ProINDY Catalog No.: 4998 Batch No.: 1

CAS Number: 719277-30-2

IUPAC Name: (1Z)-1-(5-Acetyloxy3-ethyl-2(3H)-benzothiazolylidene)-2-propanone

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C<sub>14</sub>H<sub>15</sub>NO<sub>3</sub>S

Batch Molecular Weight: 277.34

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.53$  (Dichloromethane:Methanol [95:5])

HPLC: Shows >99.5% purity
 <sup>1</sup>H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.63 5.45 5.05 Found 60.86 5.4 5.13





## **Product Information**

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## **Description:**

Dyrk1A/B inhibitor; prodrug form of INDY (Cat. No. 4997). Cell permeable. Inhibits phosphorylation of tau protein and rescues repressed calcineurin/NFAT signaling. Recovers Xenopus embryos from head malformation induced by Dyrk1A overexpression in vivo.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>14</sub>H<sub>15</sub>NO<sub>3</sub>S Batch Molecular Weight: 277.34 Physical Appearance: Pale yellow solid

Minimum Purity: >98%

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

Storage: Store at -20°C

## Solubility & Usage Info:

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:

**Ogawa** *et al* (2010) Development of a novel selective inhibitor of the Down syndrome-related kinase Dyrk1A. Nat.Commun. *1* 86. PMID: 20981014.

