1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{18}\text{H}_{16}\text{FN}_3\text{O}\cdot\frac{1}{4}\text{H}_2\text{O} \)

Batch Molecular Weight: 331.86

Physical Appearance: White solid

Solubility: DMSO to 100 mM, ethanol to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:

![Molecular Structure](image)

2. ANALYTICAL DATA

HPLC: Shows 98.3% purity

\(^1\)H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical: 65.15 5.62 12.66

Found: 64.93 5.48 12.57

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

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www.tocris.com
Product Name: Pyridone 6
Catalog No.: 6577
Batch No.: 1

CAS Number: 457081-03-7
IUPAC Name: 2-(1,1-Dimethylethyl)-9-fluoro-1,6-dihydro-7H-benz[h]imidazo[4,5-f]isoquinolin-7-one

Description:
Potent pan-JAK inhibitor; ATP-competitive inhibitor of JAK 1/2/3 and Tyk2 (IC₅₀ values are 1, 5, 15 and 1 nM, respectively). Inhibits other kinases tested at 130 nM to >10 μM. Inhibits IL-2- and IL-4-dependent proliferation of CTLL cells and blocks STAT5 phosphorylation. Also inhibits Th1 and Th2 development, and promotes Th17 differentiation from naive T cells. When used in combination with Retinoic acid, LY 294002 and CCG 1423, it induces intermediate mesoderm differentiation from ESCs. Inhibits growth of primary myeloma cells grown in the presence of bone marrow stromal cells. Cell-permeable. Please see product datasheet on www.tocris.com for full description.

Physical and Chemical Properties:
Batch Molecular Formula: C₁₈H₁₆FN₃O.₁¼H₂O
Batch Molecular Weight: 331.86
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 100 mM
ethanol 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.

References: