

Certificate of Analysis

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Product Name: 3F8

Catalog No.: 4083

Batch No.: 1

CAS Number: 159109-11-2

IUPAC Name: 5-Ethyl-7,8-dimethoxy-1*H*-pyrrolo[3,4-*c*]isoquinoline-1,3(2*H*)-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₄N₂O₄·¼H₂O

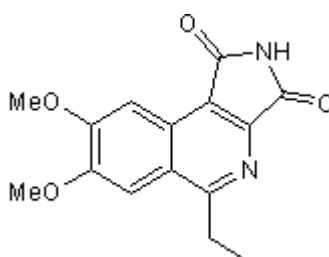
Batch Molecular Weight: 290.78

Physical Appearance: Yellow solid

Solubility: DMSO to 25 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 61.95 5.03 9.63

Found 62.08 4.93 9.71

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

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Description:

Potent and selective GSK-3 β inhibitor (IC₅₀ values are 34 and 304 nM in the presence of 10 and 100 μ M ATP respectively).

Physical and Chemical Properties:

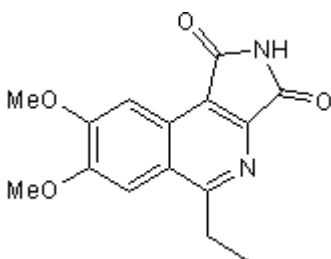
Batch Molecular Formula: C₁₅H₁₄N₂O₄· $\frac{1}{4}$ H₂O

Batch Molecular Weight: 290.78

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 25 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:

Zhong *et al* (2009) Characterization and development of novel small-molecules inhibiting GSK3 and activating wnt signaling. *Mol.Biosyst.* **5** 1356. PMID: 19823752.

Zou *et al* (2010) Benzo[*e*]isoindole-1,3-diones as potential inhibitors of glycogen synthase kinase-3 (GSK-3). Synthesis, kinase inhibitory activity, zebrafish phenotype, and modeling of binding mode. *J.Med.Chem.* **53** 994. PMID: 20030405.

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