Certificate of Analysis

Print Date: Dec 2nd 2021

TWS 119 Product Name:

CAS Number: 601514-19-6

IUPAC Name: 3-[[6-(3-Aminophenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-yl]oxy]phenol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

 $C_{18}H_{14}N_4O_2$ 318.33 Beige solid DMSO to 100 mM ethanol to 5 mM Store at +4°C

OH

Storage: **Batch Molecular Structure:**

2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: Microanalysis:

Shows 97.0% purity Consistent with structure Consistent with structure

NH₂

| | Carbon H | ydrogen N | litrogen |
|-------------|----------|-----------|----------|
| Theoretical | 67.92 | 4.43 | 17.6 |
| Found | 67.48 | 4.55 | 17.23 |

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

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Catalog No.: 7405

Batch No.: 1

TOCRIS a biotechne brand

www.tocris.com

Product Name: TWS 119

CAS Number: 601514-19-6

IUPAC Name: 3-[[6-(3-Aminophenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]oxy]phenol

Description:

TWS 119 is a potent inhibitor of glycogen synthase kinase-3 β (IC₅₀ = 30 nM). TWS 119 inhibits both GSK3 α and GSK3 β in vitro (IC₅₀ = 88 nM and 410 nM, respectively). TWS 119 induces neuronal differentiation in pluripotent murine embryonal carcinoma cells and embryonic stem cells at 400 nM. TWS 119 enhances the proliferation and survival of $\gamma\delta$ T-cells, and induces differentiation of CD8(+) T cells towards a stem cell-like phenotype at 2.5 μ M.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₄N₄O₂ Batch Molecular Weight: 318.33 Physical Appearance: Beige solid

Minimum Purity: ≥97%

Batch Molecular Structure:



References:

Forget *et al* (2012) Stimulation of Wnt/β-catenin pathway in human CD8+ T lymphocytes from blood and lung tumors leads to a shared young/memory phenotype. PLoS One **7** e41074. PMID: 22859966.

Gattinoni et al (2009) Wnt signaling arrests effector T cell differentiation and generates CD8+ memory stem cells. Nat.Med. 15 808. PMID: 19525962.

Zeng *et al* (2009) Glycogen synthase kinase 3 regulates PAX3-FKHR-mediated cell proliferation in human alveolar rhabdomyosarcoma cells. Biochem.Biophys.Res.Commun. **391** 1049. PMID: 19995556.

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Storage: Store at +4°C

Solubility & Usage Info: DMSO to 100 mM

ethanol to 5 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.

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