

**Product Name:** WS 6

**Catalog No.:** 7791

**Batch No.:** 1

CAS Number: 1421227-53-3

IUPAC Name: 4-[[6-[(Cyclopropylcarbonyl)amino]-4-pyrimidinyl]oxy]-N-[4-[(4-methyl-1-piperazinyl)methyl]-3-(trifluoromethyl)phenyl]benzeneacetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>29</sub>H<sub>31</sub>F<sub>3</sub>N<sub>6</sub>O<sub>3</sub>·H<sub>2</sub>O

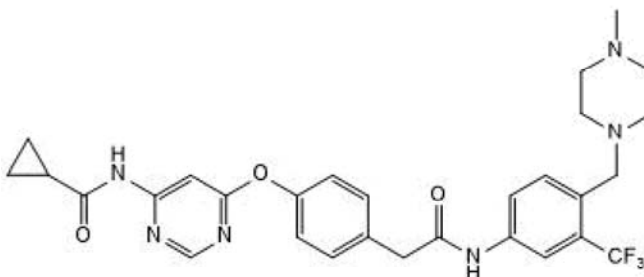
**Batch Molecular Weight:** 586.61

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM  
ethanol to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	59.38	5.67	14.33
Found	58.66	5.5	13.92

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

**Product Name:** WS 6

**Catalog No.:** 7791

**1**

CAS Number: 1421227-53-3

IUPAC Name: 4-[[6-[(Cyclopropylcarbonyl)amino]-4-pyrimidinyl]oxy]-N-[4-[(4-methyl-1-piperazinyl)methyl]-3-(trifluoromethyl)phenyl]benzeneacetamide

**Description:**

WS 6 induces growth and proliferation of cultured islet  $\alpha$  and  $\beta$  cells in vitro ( $EC_{50}$  = 0.28  $\mu$ M at  $\beta$  cells). Inhibits growth of FLT3-ITD<sup>+</sup> AML and K562 CML cells ( $IC_{50}$  values are <0.24 nM and 40.48 nM, respectively). Reduces blood glucose in an animal model of type 1 diabetes. In combination with TTNPB (Cat. No. 0761) and 1-azakenpaullone, WS 6 induces and maintains murine totipotent stem cells. In an animal model of depression WS 6 induces dendrite complexity, enhances hippocampal neurogenesis, increases GABAergic neurons and GABA expression, and displays antidepressant and anxiolytic activity. WS 6 is predicted to be ... Please see product specific page on www.tocris.com for full description.

**Physical and Chemical Properties:**

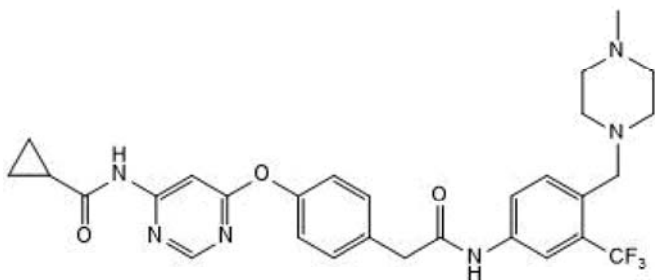
Batch Molecular Formula: C<sub>29</sub>H<sub>31</sub>F<sub>3</sub>N<sub>6</sub>O<sub>3</sub>.H<sub>2</sub>O

Batch Molecular Weight: 586.61

Physical Appearance: Off-white solid

**Minimum Purity:**  $\geq$ 98%

**Batch Molecular Structure:**



**References:**

**Hu et al** (2022) Induction of mouse totipotent stem cells by a defined chemical cocktail. *Nature*. PMID: 35728625.

**Bregante et al** (2021) Efficacy and synergy of small molecule inhibitors targeting FLT3-ITD<sup>+</sup> acute myeloid leukemia. *Cancers (Basel)* **13** 6181. PMID: 34944800.

**Zhang et al** (2021) WS6 induces adult hippocampal neurogenesis in correlation to its antidepressant effect on the alleviation of depressive-like behaviors of rats. *Neuroscience* **473** 119. PMID: 34455011.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol 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.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956