

## Certificate of Analysis

**Product Name:** SW 033291

**Catalog No.:** 5759

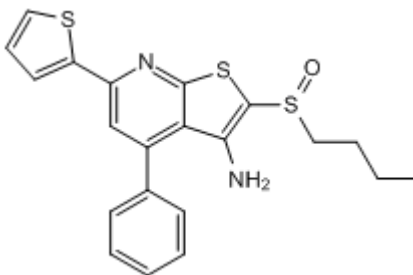
**Batch No.:** 1

CAS Number: 459147-39-8

IUPAC Name: 2-(Butylsulfinyl)-4-phenyl-6-(2-thienyl)-thieno[2,3-*b*]pyridin-3-amine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>21</sub>H<sub>20</sub>N<sub>2</sub>OS<sub>3</sub>  
**Batch Molecular Weight:** 412.59  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 20 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	61.13	4.89	6.79
Found	61.26	4.86	6.64

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

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**Description:**

High affinity 15-hydroxyprostaglandin dehydrogenase (15-PGDH) inhibitor ( $K_i = 0.1$  nM). Increases PGE<sub>2</sub> levels in A549 cells in vitro, as well as in bone marrow, colon, lung and liver in mice. Promotes hematopoiesis, recovery from DSS-induced colitis, and hepatocyte proliferation after partial hepatectomy in mice.

**Physical and Chemical Properties:**

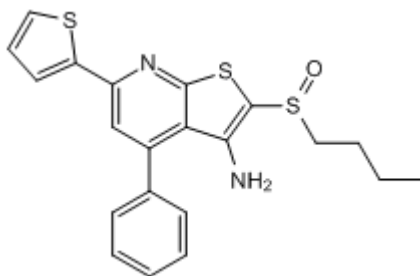
Batch Molecular Formula: C<sub>21</sub>H<sub>20</sub>N<sub>2</sub>OS<sub>3</sub>

Batch Molecular Weight: 412.59

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 20 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:**

**Zhang et al** (2015) Inhibition of the prostaglandin-degrading enzyme 15-PGDH potentiates tissue regeneration. *Science* **345** aaa2340. PMID: 26068857.

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