

# Certificate of Analysis

**Product Name:** PF 9184

**Catalog No.:** 5917

**Batch No.:** 1

CAS Number: 1221971-47-6

IUPAC Name: *N*-[3',4'-Dichloro(1,1'-biphenyl)-yl]-4-hydroxy-2*H*-1,2-benzothiazine-3-carboxamide 1,1-dioxide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>21</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S

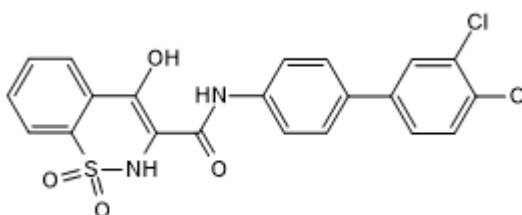
**Batch Molecular Weight:** 461.32

**Physical Appearance:** Yellow solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.2% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	54.68	3.06	6.07
Found	54.89	3.11	6.04

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**Description:**

Potent microsomal prostaglandin E synthase 1 (mPGES-1) inhibitor (IC<sub>50</sub> values are 16.5 and 1080 nM for human and rat mPGES-1, respectively). Exhibits >6500-fold selectivity for mPGES-1 over COX-1 and COX-2. Inhibits IL-1β-induced PGE<sub>2</sub> synthesis in vitro.

**Physical and Chemical Properties:**

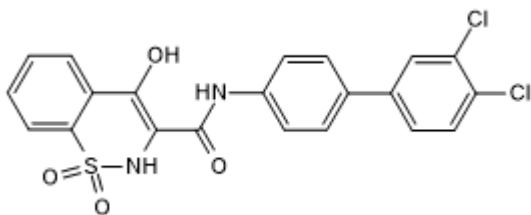
Batch Molecular Formula: C<sub>21</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S

Batch Molecular Weight: 461.32

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Mbalaviele et al** (2010) Distinction of microsomal prostaglandin E synthase-1 (mPGES-1) inhibition from cyclooxygenase-2 inhibition in cells using a novel, selective mPGES-1 inhibitor. *Biochem.Pharmacol.* **79** 1445. PMID: 20067770.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO 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.

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