

**Product Name:** PF 4800567 hydrochloride

**Catalog No.:** 4281

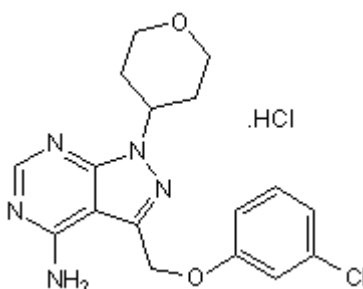
**Batch No.:** 1

**CAS Number:** 1391052-28-0

**IUPAC Name:** 3-[(3-Chlorophenoxy)methyl]-1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-d]pyrimidin-4-amine hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>18</sub>ClN<sub>5</sub>O<sub>2</sub>.HCl  
**Batch Molecular Weight:** 396.27  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.55 (Chloroform:Methanol [9:1])  
**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	51.53	4.83	17.67
Found	51.47	4.73	17.53

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**Description:**

Selective casein kinase 1 $\epsilon$  inhibitor; displays 22-fold greater potency towards CK1 $\epsilon$  than CK1 $\delta$  (IC<sub>50</sub> values are 32 and 711 nM for CK1 $\epsilon$  and CK1 $\delta$  respectively). ATP competitive. Displays minimal effect on the circadian clock.

**Physical and Chemical Properties:**

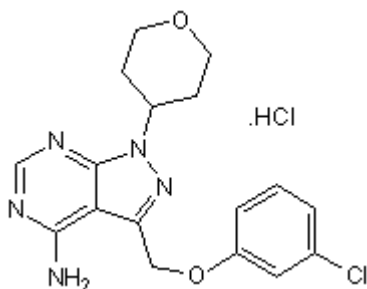
Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>ClN<sub>5</sub>O<sub>2</sub>.HCl

Batch Molecular Weight: 396.27

Physical Appearance: Off-white solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**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.

**References:**

**Walton *et al*** (2009) Selective inhibition of casein kinase 1 $\epsilon$  minimally alters circadian clock period. *J.Pharmacol.Exp.Ther.* **330** 430. PMID: 19458106.

**Etchegaray *et al*** (2010) Casein kinase 1 delta (CK1 $\delta$ ) regulates period length of the mouse suprachiasmatic circadian clock in vitro. *PLoS One* **5** e10303. PMID: 20421981.

**Meng *et al*** (2010) Entrainment of disrupted circadian behavior through inhibition of casein kinase 1 (CK1) enzymes. *Proc.Natl.Acad.Sci.USA* **107** 15240. PMID: 20696890.

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