

Certificate of Analysis

Print Date: Sep 2nd 2017

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Product Name: PF 4800567 hydrochloride Catalog No.: 4281 Batch No.: 2

CAS Number: 1391052-28-0

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₈ClN₅O₂.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: $R_f = 0.55 \text{ (MeOH/CHCl3 1/9 (free base))}$

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 51.53 4.83 17.67 Found 51.48 4.83 17.71



Product Information

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Description:

Selective casein kinase 1 ϵ inhibitor; displays 22-fold greater potency towards CK1 ϵ than CK1 δ (IC50 values are 32 and 711 nM for CK1 ϵ and CK1 δ respectively). ATP competitive. Displays minimal effect on the circadian clock.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{17}H_{18}CIN_5O_2.HCI$

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).

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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.

Licensing Information:

Sold for research purposes under agreement from Pfizer Inc.

References:

Etchegaray et al (2010) Casein kinase 1 delta (CK1δ) 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.

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

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