



Certificate of Analysis

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Product Name: PF 04449913 maleate Catalog No.: 6538 Batch No.: 1

CAS Number: 2030410-25-2

IUPAC Name: 1-((2R,4R)-2-(1H-Benzimidazol-2-yl)-1-methylpiperidin-4-yl)-3-(4-cyanophenyl)urea maleate salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{22}N_6O.C_4H_4O_4.\frac{1}{4}H_2O$

Batch Molecular Weight: 495.01

Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
Storage: Store at +4°C

Batch Molecular Structure:

C4H4O4

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.66 5.4 16.98 Found 60.64 5.34 17.1



Product Information

Print Date: Jan 22nd 2020

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Description:

Potent Smo antagonist ($IC_{50} = 5$ nM). Attenuates the leukemia-initiation potential of AML cells in a serial transplantation mouse model. Also eliminates self-propagation capacity of AML cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₂₂N₆O.C₄H₄O₄.½H₂O

Batch Molecular Weight: 495.01 Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°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).

Catalog No.: 6538

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:

Fukushima et al (2016) Small-molecule Hedgehog inhibitor attenuates the leukemia-initiation potential of acute myeloid leukemia cells. Cancer Sci. **107** 1422. PMID: 27461445.

Giordani *et al* (2016) The human Smoothened inhibitor PF-04449913 induces exit from quiescence and loss of multipotent *Drosophila* hematopoietic progenitor cells. Oncotarget **7** 55313. PMID: 27486815.

Munchhof *et al* (2011) Discovery of PF-04449913, a potent and orally bioavailable inhibitor of smoothened. ACS Med.Chem.Lett. **3** 106. PMID: 24900436.

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