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Product Name: Vismodegib Catalog No.: 7710 Batch No.: 1

Certificate of Analysis

CAS Number: 879085-55-9

IUPAC Name: 2-Chloro-*N*-[4-chloro-3-(2-pyridinyl)phenyl]-4-(methylsulfonyl)benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{14}Cl_2N_2O_3S$.

Batch Molecular Weight: 421.3

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.17 3.35 6.65 Found 53.92 3.31 6.59



Product Information

Print Date: Aug 31st 2022

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Description:

Vismodegib is a potent hedgehog pathway inhibitor ($IC_{50} = 3$ nM). It causes tumor regressions in allograft medulloblastoma mice model and tumor growth inhibition in a xenograft mouse models of colorectal cancer. Vismodegib is orally bioavailable.

Physical and Chemical Properties:

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Batch Molecular Weight: 421.3

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

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.

References:

Wong *et al* (2011) Pharmacokinetic-pharmacodynamic analysis of vismodegib in preclinical models of mutational and ligand-dependent Hedgehog pathway activation. Clin.Cancer Res. *17* 4682. PMID: 21610148.

Robarge et al (2009) GDC-0449-a potent inhibitor of the hedgehog pathway. Bioorg.Med.Chem.Lett. 19 5576. PMID: 19716296.

Wong *et al* (2009) Preclinical assessment of the absorption, distribution, metabolism and excretion of GDC-0449 (2-chloro-N-(4-chloro-3-(pyridin-2-yl)phenyl)-4-(methylsulfonyl)benzamide), an orally bioavailable systemic Hedgehog signalling pathway inhibitor. Xenobiotica **39** 850. PMID: 19845436.

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