

Certificate of Analysis

Print Date: Feb 13th 2023

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Product Name: Sonidegib Catalog No.: 7826 Batch No.: 1

CAS Number: 956697-53-3

rel-N- [6-[(2R,6S)-2,6-Dimethyl-4-morpholinyl]-3-pyridinyl]-2-methyl-4'-(trifluoromethoxy)[1,1'-biphenyl]-3-pyridinyl]-2-methyl-4'-(trifluoromethoxy)[1,1'-biphenyl]-3-pyridinyl]-3-pyridinyl]-2-methyl-4'-(trifluoromethoxy)[1,1'-biphenyl]-3-pyridiny**IUPAC Name:**

carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{26}H_{26}F_3N_3O_3$

Batch Molecular Weight: 485.51 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 64.32 5.4 8.66

Found 64.07 5.39 8.59

Tel: +44 (0)1235 529449 www.tocris.com/distributors Tel:+1 612 379 2956



Product Information

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IUPAC Name: rel-N-[6-[(2R,6S)-2,6-Dimethyl-4-morpholinyl]-3-pyridinyl]-2-methyl-4'-(trifluoromethoxy)[1,1'-biphenyl]-3-

carboxamide

Description:

Sonidegib is a potent Smoothened (Smo) receptor antagonist (IC $_{50}$ values are 1.3 nM and 2.5 nM at mouse and human receptors, respectively). Inhibits growth of a variety of tumor types including basal cell carcinoma, small cell lung cancer and medulloblastoma. Sonidegib inhibits Hh pathway in CD34+ chronic myeloid leukemia cells; it reduces both the number of cells and self-renewal ability. Brain penetrant and orally bioavailable.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{26}H_{26}F_3N_3O_3$

Batch Molecular Weight: 485.51 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

F₃CO

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:

Irvine et al (2016) Deregulated hedgehog pathway signaling is inhibited by the smoothened antagonist LDE225 (Sonidegib) in chronic phase chronic myeloid leukaemia. Sci.Rep. 6 25476. PMID: 27157927.

Pan et al (2010) Discovery of NVP-LDE225, a potent and selective smoothened antagonist. ACS Med.Chem.Lett. 1 130. PMID: 24900187.

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