

Certificate of Analysis

Print Date: Oct 28th 2021

www.tocris.com

Product Name: SEN 177 Catalog No.: 6979 Batch No.: 1

CAS Number: 2117405-13-5

IUPAC Name: 6'-Fluoro-2-[4-(4-methyl-4*H*-1,2,4-triazol-3-yl)-1-piperidinyl]-3,3'-bipyridine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{19}FN_{6}.^{3}4H_{2}O$

Batch Molecular Weight: 351.9

Physical Appearance: Off White solid
Solubility: DMSO to 20 mM

ethanol to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.44 5.87 23.88

Found 61.66 5.86 23.95

Tel: +86 (21) 52380373



Product Information

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IUPAC Name: 6'-Fluoro-2-[4-(4-methyl-4*H*-1,2,4-triazol-3-yl)-1-piperidinyl]-3,3'-bipyridine

Description:

SEN 177 is a potent glutaminyl cyclase (QPCT) inhibitor (IC_{50} = 53 nM). SEN 177 reduces aggregation of mutant huntingtin (mHTT) through inhibition of QPCT and reduces Q80 aggregates in vitro. Inhibition of QPCT also reduces aggregate formation in in vivo models of Huntington's disease. SEN 177 potently inhibits QPCT-like protein (IC_{50} = 13 nM) and disrupts binding of SIRP- α to CD47. The compound increases antibody-dependent cellular phagocytosis and cytotoxicity in cancer cell lines.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₉FN₆.34H₂O

Batch Molecular Weight: 351.9 Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

N N F

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 mM ethanol to 20 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:

Logtenberg *et al* (2019) Glutaminyl cyclase is an enzymatic modifier of the CD47- SIRPα axis and a target for cancer immunotherapy. Nat.Med. **25** 612. PMID: 30833751.

Jimenez-Sanchez *et al* (2015) siRNA screen identifies QPCT as a druggable target for Huntington's disease. Nat.Chem.Biol. *11* 347. PMID: 25848931.