Print Date: Sep 5th 2022

Certificate of Analysis

www.tocris.com

Product Name: **Linifanib** **Catalog No.: 7743** **Batch No.: 1**

CAS Number: 796967-16-3

IUPAC Name: *N*-[4-(3-Amino-1*H*-indazol-4-yl)phenyl]-*N'*-(2-fluoro-5-methylphenyl)urea

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{18}FN_5O.¼H_2O$

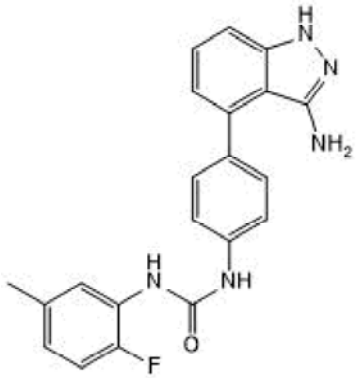
Batch Molecular Weight: 379.9

Physical Appearance: Off-white solid

Solubility: ethanol to 20 mM
DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.39	4.91	18.43
Found	66.65	4.86	18.48

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **Linifanib** **Catalog No.: 7743** **1**

CAS Number: 796967-16-3

IUPAC Name: *N*-[4-(3-Amino-1*H*-indazol-4-yl)phenyl]-*N*'-(2-fluoro-5-methylphenyl)urea

Description:

Linifanib is a potent receptor tyrosine kinase (RTK) inhibitor. It inhibits PDGFRβ, KDR, FLT3, CSF-1R (IC_{50} values are 2, 4, 4 and 7 nM, respectively). Linifanib inhibits angiogenesis in vascularized micro-organs and potently inhibits VEGF-stimulated endothelial cell proliferation (IC_{50} = 0.2 nM). Linifanib also promotes the generation and reprogramming of iPSCs from somatic cells.

Physical and Chemical Properties:

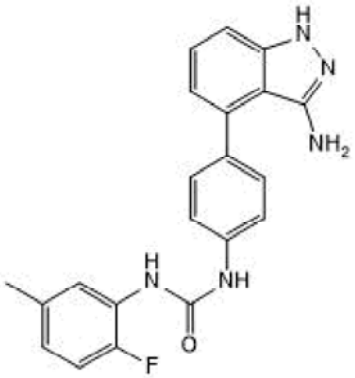
Batch Molecular Formula: $C_{21}H_{18}FN_5O.¼H_2O$

Batch Molecular Weight: 379.9

Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 20 mM
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:

Guan *et al* (2022) Chemical reprogramming of human somatic cells to pluripotent stem cells. Nature ***605*** 325. PMID: 35418683.

Jahid *et al* (2022) Structure-based design of CDC42 effector interaction inhibitors for the treatment of cancer. Cell Rep. ***39*** 110641. PMID: 35385746.

Albert *et al* (2006) Preclinical activity of ABT-869, a multitargeted receptor tyrosine kinase inhibitor. Mol.Cancer Ther. ***5*** 995. PMID: 16648571.