

Product Name: Nintedanib

Catalog No.: 7049

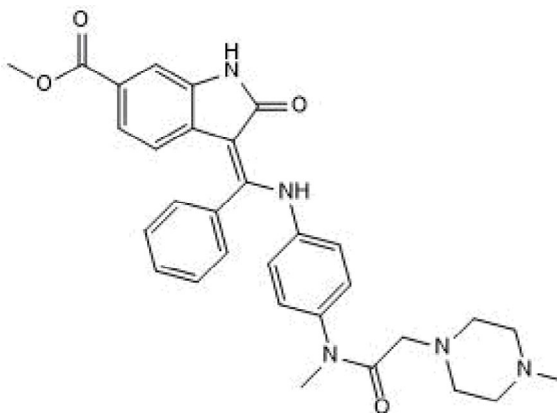
Batch No.: 2

CAS Number: 656247-17-5

IUPAC Name: Methyl (Z)-3-[[[4-(N-methyl-2-(4-methylpiperazin-1-yl)acetamido)phenyl]amino)(phenyl)methylene]-2-oxoindoline-6-carboxylate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₁ H ₃₃ N ₅ O ₄
Batch Molecular Weight:	539.64
Physical Appearance:	Yellow solid
Solubility:	DMSO to 2 mM with gentle warming
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.4% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	69	6.16	12.98
Found	68.33	6.14	12.77

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

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Description:

Nintedanib is a potent inhibitor of vascular endothelial growth factor receptors (VEGFRs), platelet-derived growth factor receptors (PDGFRs) and fibroblast growth factor receptors (FGFRs) (IC₅₀ values are 13 - 34 nM for VEGFR subtypes, 59 - 65 nM for PDGFR subtypes, 37 - 108 nM for FGFR subtypes). Also inhibits Flt-3, Lck, Lyn and Src (IC₅₀ values are 25 - 200 nM). Inhibits proliferation in VEGF-stimulated endothelial cells, and PDGF-stimulated pericytes and vascular smooth muscle cells. Reduces vessel density and integrity, and inhibits tumor growth in a mouse tumor xenograft model.

Physical and Chemical Properties:

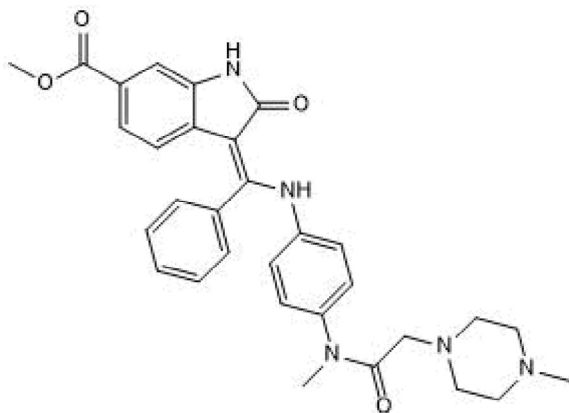
Batch Molecular Formula: C₃₁H₃₃N₅O₄

Batch Molecular Weight: 539.64

Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 2 mM with gentle warming

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Hilberg *et al* (2008) BIBF 1120: triple angiokinase inhibitor with sustained receptor blockade and good antitumor efficacy. *Cancer Res.* **68** 4774. PMID: 18559524.

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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