



Nintedanib esylate

Catalog No: tcsc3475

Available Sizes
Size: 10mg
Size: 50mg
Size: 100mg
Size: 200mg
Size: 500mg
Size: 1g
Size: 2g
Specifications
CAS No: 656247-18-6
Formula: C ₃₃ H ₃₉ N ₅ O ₇ S
Pathway: Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK
Target: VEGFR;PDGFR;FGFR
Purity / Grade: >98%
Solubility: DMSO: 92.85 mg/mL (142.90 mM; Need ultrasonic and warming)





Alternative Names:

BIBF 1120 (esylate)

Observed Molecular Weight:

649.76

Product Description

Nintedanib esylate (BIBF 1120 esylate) is a potent triple angiokinase inhibitor for **VEGFR1/2/3**, **FGFR1/2/3** and **PDGFR\alpha/\beta** with **IC**₅₀ s of 34 nM/13 nM, 69 nM/37 nM/108 nM and 59 nM/65 nM, respectively.

IC50 & Target: IC50: 34 nM (VEGFR1), 13 nM (VEGFR2), 13 nM (VEGFR3), 69 nM (FGFR1), 37 nM (FGFR1), 108 nM (FGFR1), 59 nM (PDGFR α), 65 nM (PDGFR β)^[1]

In Vitro: Nintedanib (BIBF 1120) binds to the ATP-binding site in the cleft between the amino and carboxy terminal lobes of the kinase domain. Nintedanib (BIBF 1120) inhibits proliferation of PDGF-BB stimulated BRPs with EC $_{50}$ of 79 nM in cell assays. Nintedanib (BIBF 1120) (100 nM) blocks activation of MAPK after stimulation with 5% serum plus PDGF-BB. Nintedanib (BIBF 1120) prevents PDGF-BB stimulated proliferation with an EC $_{50}$ of 69 nM in cultures of human vascular smooth muscle cells (HUASMC)^[1].

In Vivo: Nintedanib (BIBF 1120) (25-100 mg/kg daily p.o.) is highly active in all tumor models, including human tumor xenografts growing in nude mice and a syngeneic rat tumor model. This is evident in the magnetic resonance imaging of tumor perfusion after 3 days, reducing vessel density and vessel integrity after 5 days, and profound growth inhibition^[1]. Nintedanib (BIBF 1120) is orally available and displays encouraging efficacy in *in vivo* tumor models while being well tolerated^[2].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!