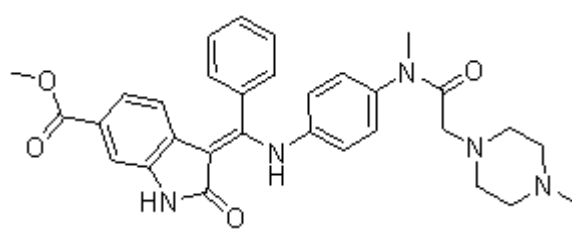


Certificate of Analysis

| | | |
|---------------------|----------------------|--------------|
| MedKoo Cat#: | Product Name: | Lot#: |
| 200496 | Nintedanib | A9T03K06 |

| | |
|---|--|
| Chemical name | |
| (Z)-methyl 3-(((4-(N-methyl-2-(4-methylpiperazin-1-yl)acetamido)phenyl)amino)(phenyl)methylene)-2-oxoindoline-6-carboxylate | |
| Synonyms | |
| BIBF1120; BIBF 1120; BIBF-1120; Nintedanib. Brand name: Vargatef. | |
| Chemical structure | CAS# and Theoretical analysis |
|  | MedKoo Cat#: 200496 Name: Nintedanib CAS#: 656247-17-5 (free base) Lot#: A9T03K06 Chemical Formula: C ₃₁ H ₃₃ N ₅ O ₄ Exact Mass: 539.25325 Molecular Weight: 539.62 |

| Analysis item | Specifications / Results |
|---------------------------|--|
| Appearance | Yellow solid powder |
| Structure | ¹ H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature. |
| Purity (HPLC) | >98.0% |
| Solubility | Soluble in DMSO and 5% HCl, very poorly soluble in ethanol; very poorly soluble in water. |
| Conclusion | This product conforms with MedKoo's quality standards |
| Shipping condition | Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs. |
| Storage condition | Short term storage (weeks): 0 – 4 °C under dry condition Long term storage (months): -20 °C under dry condition |
| Shelf life | At least 5 years if properly stored. |

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE