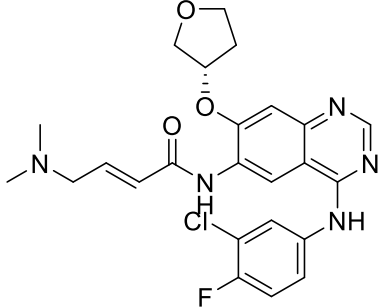




Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
200500	Afatinib Free Base	XPR70102

Chemical name	
(S,E)-N-(4-((3-chloro-4-fluorophenyl)amino)-7-((tetrahydrofuran-3-yl)oxy)quinazolin-6-yl)-4-(dimethylamino)but-2-enamide	
Synonyms	
BIBW-2992; BIBW 2992; BIBW2992; Afatinib free base; Gilotrif; Tomtovok; Tovok	
Chemical structure	CAS# and Theoretical analysis
	MedKoo Cat#: 200500 Name: Afatinib free base CAS#: 439081-18-2 (free base) Lot#: XPR70102 Chemical Formula: C ₂₄ H ₂₅ ClFN ₅ O ₃ Exact Mass: 485.163 Molecular Weight: 485.94

Analysis item	Specifications / Results
Appearance	White crystalline 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)	>99.0%
Solubility	Soluble in DMSO, not 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