

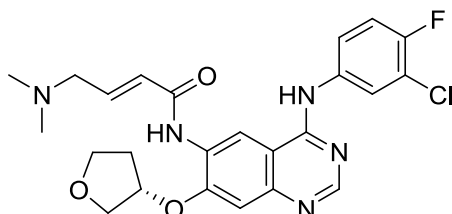


Northeast Business Center

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Certificate of Analysis



Product Name:	BIBW-2992
Synonym	Afatinib, Tovok
CAS No:	850140-72-6
Prod. No:	CT-BW2992
Lot No:	Lot 03
Batch Empirical Formula Batch Empirical Wt.	$C_{24}H_{25}ClFN_5O_3 \cdot 0.7H_2O$ 498.6
Solubility	Soluble in DMSO
Storage	Store at 0 °C (short term), - 20 °C (long term), desiccated

Appearance	White Powder
Quality Control	MS: [✓] 1H NMR: [✓] Achiral HPLC: [✓] Chiral HPLC: [✓] Quantitative Elemental Analysis: [✓] $C_{24}H_{25}ClFN_5O_3 \cdot 0.7H_2O$ Calculated: C: 57.82%; H: 5.34%; N: 14.05% Found: C: 57.98%; H: 5.37%; N: 13.99%
Chemical Purity	>99.5% (Achiral HPLC at 214 nm) >99.5% (Achiral HPLC at 254 nm)
Optical Purity	100% (Chiral HPLC)