

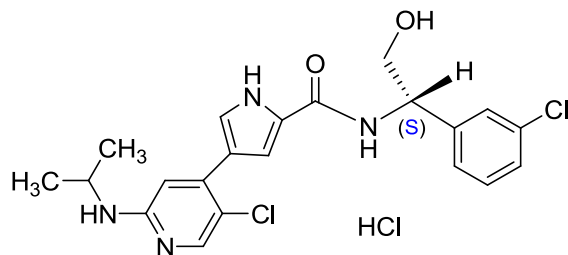


Northeast Business Center

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Certificate of Analysis



Product Name:	Ulixertinib (Hydrochloride) (1:1)*
Synonym:	BVD-523, VRT752271
CAS No:	869886-67-9
Prod. No:	CT-VRT752
Lot No:	02
Batch Empirical Formula Batch Empirical. Wt.	C ₂₁ H ₂₂ Cl ₂ N ₄ O ₂ · HCl 469.8
Solubility	Soluble in DMSO (47mg/ml, 100mM)
Storage	Store at 0 °C (short term), -20 °C (long term), desiccated

Appearance	Snow-white crystalline powder
Quality Control	MS: [✓] ¹ HNMR: [✓] HPLC: [✓] Chiral HPLC: [✓] Quantitative Elemental Analysis: [✓] C₂₁H₂₂Cl₂N₄O₂ · HCl Calculated: C: 53.69%; H:4.93 %; N: 11.93%; Cl: 22.64% Found: C: 53.41%; H:5.02 %; N: 11.76%; Cl: 22.70% * Confirmed by a perfect Elemental Analysis
Chemical Purity	>99.5% (HPLC at 214 nm) >99.5% (HPLC at 254 nm)
Optical Purity (ee)	100% (Chiral HPLC)