

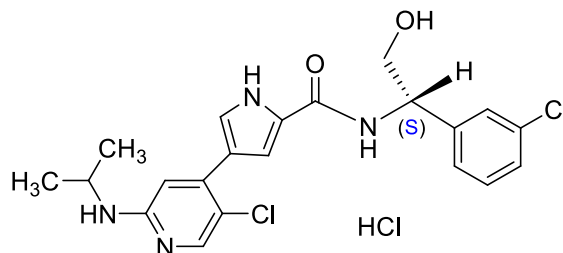


Northeast Business Center

7301 E. 90th Street, Suite 117, Indianapolis, IN 46256, USA

Phone: 317.598.0828 Fax: 317.598.0835 www.chemietek.com

## Certificate of Analysis



<b>Product Name:</b>	<b>Ulixertinib (Hydrochloride) (1:1)*</b>
<b>Synonym:</b>	BVD-523, VRT752271
<b>CAS No:</b>	1956366-10-1
<b>Prod. No:</b>	CT-VRT752
<b>Lot No:</b>	02
Batch Empirical Formula Batch Empirical. Wt.	C <sub>21</sub> H <sub>22</sub> Cl <sub>2</sub> N <sub>4</sub> O <sub>2</sub> · HCl 469.8
<b>Solubility</b>	Soluble in DMSO (47mg/ml, 100mM)
<b>Storage</b>	Store at 0 °C (short term), -20 °C ( long term), desiccated

<b>Appearance</b>	Snow-white crystalline powder
<b>Quality Control</b>	MS: [✓] <sup>1</sup> HNMR: [✓] HPLC: [✓] Chiral HPLC: [✓] Quantitative Elemental Analysis: [✓] C <sub>21</sub> H <sub>22</sub> Cl <sub>2</sub> N <sub>4</sub> O <sub>2</sub> · 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
<b>Chemical Purity</b>	>99.5% (HPLC at 214 nm) >99.5% (HPLC at 254 nm)
<b>Optical Purity (ee)</b>	100% (Chiral HPLC)