



# Certificate of analysis

Product name: Regorafenib

Cas number: 755037-03-7

Molecular Formula:  $C_{21}H_{15}ClF_4N_4O_3$

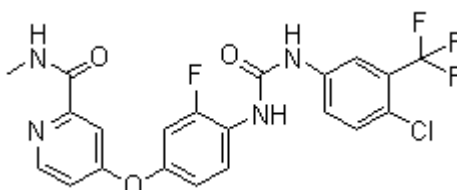
Molecular Weight: 482.81

Date of production: Nov. 10, 2017

Batch NO: 20171110

EXP DATE: Nov. 09, 2019

Chemical structure:



Items	Specifications	Results
Description	off-white to light pink powder	off-white powder
Identification	NMR HPLC	Conform
Water content	≤0.5%	0.23%
Residue on ignition	≤0.1%	0.03%
Heavy metal	≤10ppm	Conform
Residual Solvents	MeOH≤0.3% EtOH≤0.5% THF≤0.1%	N.D 0.08% N.D
Solubility	Soluble in DMSO and THF slightly soluble in MeOH, insoluble in H <sub>2</sub> O	Conform
Related substances	Impurity A ≤0.1% Impurity B ≤0.1% Impurity C ≤0.1% Impurity D ≤0.1% Impurity F ≤0.1%	0.016% 0.036% N.D N.D N.D
Single impurity	≤0.1%	0.06%
Total impurities	≤1.0%	0.10%
Assay	≥99%	99.9%

**Conclusion: It complies with the Enterprise Standard.**

Analyst: Zhao

Checker: Liu

Q.C Director. Fang