## Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
555898	EST64454 HCl	A21T11K19

Chemical name		
1-(4-(2-((1-(3,4-difluorophenyl)-1H-pyrazol-3-yl)methoxy)ethyl)piperazin-1-yl)ethan-1-one		
hydrochloride		
Synonyms		
EST64454 HCl; EST64454 hydrochloride; EST64454; EST-64454; EST 64454;		
Chemical structure	CAS# and Theoretical analysis	
0	MedKoo Cat#: 555898	
j.,,	Name: EST64454 HCl	
	CAS#: 1950569-11-5 (HCl)	
O N N F	Lot#: A21T11K19	
	Chemical Formula: C <sub>18</sub> H <sub>23</sub> ClF <sub>2</sub> N <sub>4</sub> O <sub>2</sub>	
H-CI	Molecular Weight: 400.8548	

Analysis item	Specifications / Results
Appearance	White to off white solid powder
Structure	<sup>1</sup> 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)	>98.0%
Solubility	Soluble in MeOD
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.
<b>Storage condition</b>	Short term storage (weeks): 0 – 4 °C under dry condition Long term storage (months): -20 °C under dry condition
Shelf life	At least 3 years if properly stored.

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE