

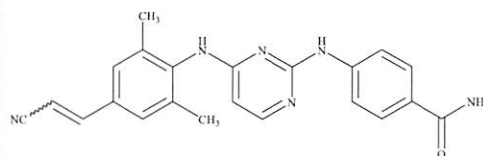
Certificate of Analysis

Certificate No.: 20240614504



Date: June 14, 2024

Retest date: June 10, 2027

Compound Name: Rilpivirine Impurity 5 (Mixture of <i>Z</i> and <i>E</i> Isomers)	
Synonyms:	4-(((4-((4-(2-cyanovinyl)-2,6-dimethylphenyl)amino)pyrimidin-2-yl)amino)benzamide
TLC Catalogue Number:	R-349
CAS Number:	2280857-80-7
Molecular Weight:	384.44
Molecular Formula:	C ₂₂ H ₂₀ N ₆ O
Source:	TLC Pharmaceutical Standards
Source Lot No.:	4234-096A6
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMF, DMSO



Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	97.8%
Impurity (HPLC)	RT 13.42, 0.17%; RT 15.94, 0.67%; RT 16.26, 1.06%	
Water Content (KF)	N/A	1.1%
Residual Solvents (NMR)	0.5% methanol	
Assay (%)	Not less than 90.0%	96.2%
Recommendation:	Release. The compound contains 21.2% <i>Z</i> -Isomer (RT 12.27) and 76.6% <i>E</i> -Isomer (RT 12.83) according to its HPLC and LC-MS.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		06/17/2024
Approved by:	Quality Assurance		06/17/2024

Attachments: HPLC, IR, MS and NMR spectra.