

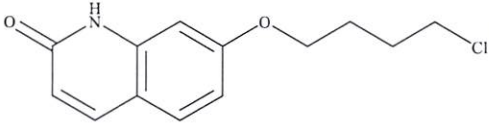
Certificate of Analysis

Certificate No.: **20240606004**



Date: June 6, 2024

Retest date: May 31, 2027

Compound Name: Brexpiprazole Impurity 23	
Synonyms:	7-(4-chlorobutoxy)quinolin-2(1H)-one
TLC Catalogue Number:	B-115026
CAS Number:	913613-82-8
Molecular Weight:	251.71
Molecular Formula:	C ₁₃ H ₁₄ ClNO ₂
Source:	TLC Pharmaceutical Standards
Source Lot No.:	6355-006A3
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, 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%	98.3%
Impurity (HPLC)	RT 8.68, 0.51%; RT 8.96, 1.17%	
Water Content (KF)	N/A	0.1%
Residual Solvents (NMR)	0.7% dichloromethane	
Assay (%)	Not less than 90.0%	97.5%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		06/07/2024
Approved by:	Quality Assurance		06/07/2024

Attachments: HPLC, IR, MS and NMR spectra.