

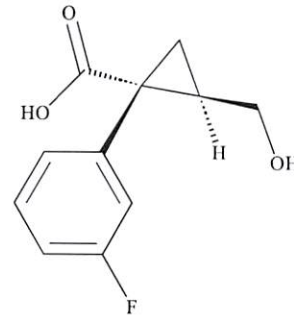
Certificate of Analysis

Certificate No.: 20260624018


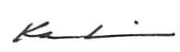
Date: June 24, 2026

Retest date: June 17, 2029

Compound Name: Lemborexant Impurity 54	
Synonyms:	(1R,2R)-1-(3-fluorophenyl)-2-(hydroxymethyl)cyclopropane-1-carboxylic acid
TLC Catalogue Number:	L-211064
CAS Number:	3070371-35-3
Alternate CAS Number:	N/A
Molecular Weight:	210.20
Molecular Formula:	C ₁₁ H ₁₁ FO ₃
Source:	TLC Pharmaceutical Standards
Source Lot No.:	7456-079A4
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO, DMF, Acetonitrile



Test Description	Specifications	Results
Visual Description	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%	98.8%
Impurity (HPLC)	RT 12.77, 1.18%	
Water Content (KF)	N/A	0.2%
Optical Rotation	N/A	[α] _D ^{25.0} (c=0.56, CH ₃ OH): +4.3°
Residual Solvents (NMR)	0.1% n-hexane and 1.0% ethyl acetate	
Assay (%)	Not less than 90.0%	97.5%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		06/24/2026
Approved by:	Quality Assurance		06/24/2026

Attachments: Peak Attribution Table, Assay Calculation, HPLC, IR, MS and NMR spectra.