

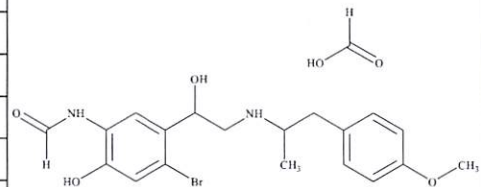
Certificate of Analysis

Certificate No.: 20250929022



Date: September 29, 2025

Retest date: September 28, 2028

Compound Name: Formoterol Impurity 67 Formate	
Synonyms:	N-(4-bromo-2-hydroxy-5-(1-hydroxy-2-((1-(4-methoxyphenyl)propan-2-yl)amino)ethyl)phenyl)formamide, formic acid (1:1)
TLC Catalogue Number:	F-1149
CAS Number:	N/A
Alternate CAS Number:	N/A
Molecular Weight:	423.31 46.03
Molecular Formula:	C ₁₉ H ₂₃ BrN ₂ O ₄ . CH ₂ O ₂
Source:	TLC Pharmaceutical Standards
Source Lot No.:	7058-055A4
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO, Acetonitrile



Test Description	Specifications	Results
Visual Description	Pale brown 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%	97.1%
Impurity (HPLC)	RT 5.59, 0.61%; RT 6.38, 0.83%; RT 8.69, 0.71%	
Residual Solvents (NMR)	No residual solvent	
Assay (qNMR)	Not less than 90.0%	96.0%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		09/30/2025
Approved by:	Quality Assurance		09/30/2025

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