

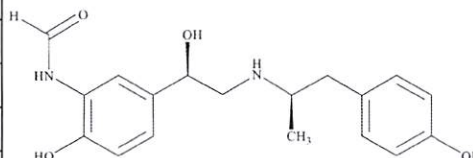
Certificate of Analysis

Certificate No.: **20240109011**


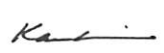
Date: January 9, 2024

Retest date: December 28, 2026

Compound Name: <i>O</i> -Desmethyl (R,R)-Formoterol (<i>O</i> -Desmethyl Arformoterol)	
Synonyms:	<i>N</i> -(2-hydroxy-5-((R)-1-hydroxy-2-(((R)-1-(4-hydroxyphenyl)propan-2-yl)amino)ethyl)phenyl)formamide
TLC Catalogue Number:	F-1136
CAS Number:	N/A
Molecular Weight:	330.38
Molecular Formula:	C ₁₈ H ₂₂ N ₂ O ₄
Source:	TLC Pharmaceutical Standards
Source Lot No.:	5946-090A3
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO, DMF, Ethanol



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%	99.0%
Impurity (HPLC)	RT 1.83, 0.69%	
Purity (Chiral HPLC)	Not less than 98.0%	100.0%
Optical Rotation	N/A	[α] _D ^{25.0} (c=0.31, CH ₃ OH): -38.0°
Residual Solvents (NMR)	2.1% methanol	
Assay (qNMR)	Not less than 90.0%	91.9%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		01/11/2024
Approved by:	Quality Assurance		01/11/2024

Attachments: HPLC, IR, MS and NMR spectra.