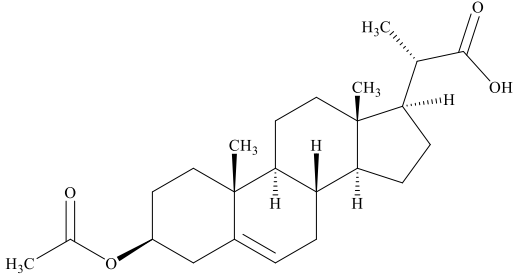


Certificate of Analysis

Certificate No.: 20200609005

Date: June 9, 2020

Retest date: June 2, 2023

Compound Name:	Cholesterol Impurity 12	
Synonyms:	(S)-2-((3S,8S,9S,10R,13S,14S,17R)-3-acetoxy-10,13-dimethyl-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyclopenta[<i>a</i>]phenanthren-17-yl)propanoic acid	
TLC Catalogue Number:	C-5347	
CAS Number:	1474-14-2	
Molecular Weight:	388.55	
Molecular Formula:	C ₂₄ H ₃₆ O ₄	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	3914-050A1	
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
¹H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	100.0%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	0.2%
Optical Rotation	[α] _D ^{29.0} (c=3.00, CHCl ₃): -76.0°	[α] _D ^{25.0} (c=0.59, CHCl ₃): -76.2°
Residual Solvents (NMR)	No residual solvent	
Assay (%)	Not less than 90.0%	99.8%
Recommendation:	Released.	

Name	Department	Signature	Date
Reviewed and approved by:	Analytical Services		
Approved by:	Quality Assurance		

Attachments: HPLC, IR, MS and NMR spectra.