

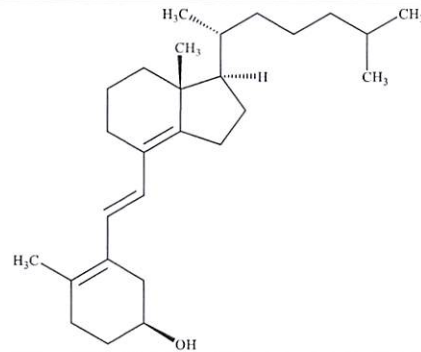
Certificate of Analysis

Certificate No.: 20260112504



Date: January 12, 2026

Retest date: June 19, 2026

Compound Name: Cholecalciferol EP Impurity D (Iso-Tachysterol 3)	
Synonyms:	(S)-4-methyl-3-((E)-2-((1R,7aR)-7a-methyl-1-((R)-6-methylheptan-2-yl)-2,3,5,6,7,7a-hexahydro-1H-inden-4-yl)vinyl)cyclohex-3-en-1-ol
TLC Catalogue Number:	C-517
CAS Number:	22350-43-2
Alternate CAS Number:	N/A
Molecular Weight:	384.65
Molecular Formula:	C ₂₇ H ₄₄ O
Source:	TLC Pharmaceutical Standards
Source Lot No.:	C0236-017A1
Storage Conditions:	Protect from light and air, store at -20 °C
Solubility:	Methanol



Test Description	Specifications	Results
Visual Description	Pale yellow semi-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 90.0%	97.3%
Impurity (HPLC)	RT 4.32, 1.33%; RT 4.51, 0.33%; RT 5.40, 0.43%	
Optical Rotation	[α] _D ^{25.0} (c=0.30, acetone): +4.0°	[α] _D ^{25.1} (c=0.37, acetone): +3.5°
Residual Solvents (NMR)	No residual solvent	
Assay (qNMR)	Not less than 55.0%	83.9%
Recommendation:	Release. The compound is unstable and can easily deteriorate. It should be stored as the storage condition stated in COA, and to be used immediately upon received. Due to the stability issue, this item is more suitable for qualitative applications than for quantitative purposes.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		01/12/2026
Approved by:	Quality Assurance		01/12/2026

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