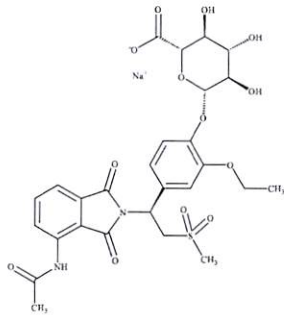


Certificate of Analysis



Certificate No.: **20250515502-2**

Date: May 15, 2025

Retest date: May 12, 2028

Compound Name:		Apremilast Metabolite M12 Sodium Salt (O-Desmethyl Apremilast Glucuronide Sodium Salt)
Synonyms:	(2S,3S,4S,5R,6S)-6-(4-((S)-1-(4-acetamido-1,3-dioxoisindolin-2-yl)-2-(methylsulfonyl)ethyl)-2-ethoxyphenoxy)-3,4,5-trihydroxytetrahydro-2H-pyran-2-carboxylate, sodium salt (1:1)	
TLC Catalogue Number:	A-182020	
CAS Number:	N/A	
Alternate CAS Number:	1384814-89-4 (free acid)	
Molecular Weight:	621.59 22.99	
Molecular Formula:	C ₂₇ H ₂₉ N ₂ O ₁₃ S. Na	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	2555-100A2	
Storage Conditions:	Store at 2-8 °C	
Solubility:	Water	

Test Description	Specifications	Results
Visual Description	White to 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%	99.5%
Impurity (HPLC)	RT 7.46, 0.10%; RT 19.76, 0.12%	
Optical Rotation	N/A	$[\alpha]_D^{25.0}(c=0.78, H_2O): -20.8^\circ$
Residual Solvents (NMR)	0.1% acetonitrile and 1.0% sodium acetate	
Assay (qNMR)	Not less than 90.0%	95.0%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		04/15/2026
Approved by:	Quality Assurance		04/15/2026

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