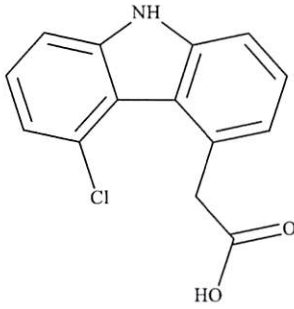


Certificate of Analysis



Certificate No.: **20260515002**

Date: May 15, 2026

Retest date: May 14, 2029

Compound Name:	Carbazole Impurity 1	
Synonyms:	2-(5-chloro-9H-carbazol-4-yl)acetic acid	
TLC Catalogue Number:	C-324004	
CAS Number:	N/A	
Alternate CAS Number:	N/A	
Molecular Weight:	259.69	
Molecular Formula:	C ₁₄ H ₁₀ ClNO ₂	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	7403-029A11	
Storage Conditions:	Store at 2-8 °C	
Solubility:	Methanol, DMSO, DMF	

Test Description	Specifications	Results
Visual Description	Pale yellow 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%	99.1%
Impurity (HPLC)	RT 4.79, 0.17%; RT 13.87, 0.21%; RT 16.75, 0.19%	
Water Content (KF)	N/A	0.2%
Residual Solvents (NMR)	1.3% methanol and 0.1% dimethylformamide	
Assay (%)	Not less than 90.0%	97.5%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		05/15/2026
Approved by:	Quality Assurance		05/15/2026

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