



## Certificate of Analysis

Certificate No.: 20241010040

Date: October 10, 2024

Retest date: September 30, 2027

<b>Compound Name:</b>	<b>Thiamine Impurity 29</b>	
<b>Synonyms:</b>	1-(6-amino-5-methoxy-2-methylpyrimidin-4-yl)-3-mercapto-propan-2-ol	
<b>TLC Catalogue Number:</b>	T-8456	
<b>CAS Number:</b>	N/A	
<b>Molecular Weight:</b>	229.30	
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>15</sub> N <sub>3</sub> O <sub>2</sub> S	
<b>Source:</b>	TLC Pharmaceutical Standards	
<b>Source Lot No.:</b>	6560-006A4	
<b>Storage Conditions:</b>	Protect from air, store at 2-8 °C	
<b>Solubility:</b>	Methanol, DMSO, Ethanol	

Test Description	Specifications	Results
<b>Visual Description</b>	Off-white solid	<b>Conforms</b>
<b>Identification</b>		
<b>IR</b>	Conforms to structure	<b>Conforms</b>
<b>MS</b>	Conforms to structure	<b>Conforms</b>
<b><sup>1</sup>H NMR</b>	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>98.7%</b>
<b>Impurity (HPLC)</b>	RT 12.33, 0.29%; RT 15.37, 0.24%; RT 15.43, 0.24%	
<b>Residual Solvents (NMR)</b>	1.5% isopropyl ether	
<b>Assay (qNMR)</b>	Not less than 90.0%	<b>96.8%</b>
<b>Recommendation:</b>	<b>Release.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		10/15/2024
Approved by:	Quality Assurance		10/15/2024

Attachments: HPLC, IR, MS and NMR spectra.