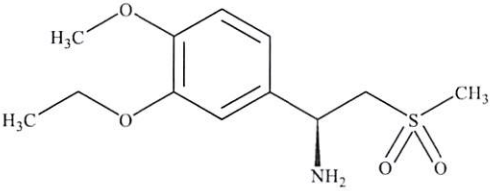


## Certificate of Analysis


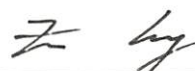
Certificate No.: **20250520010**

Date: May 20, 2025

Retest date: May 20, 2028

<b>Compound Name:</b>	<b>Apremilast Impurity 2</b>		
<b>Synonyms:</b>	(S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethan-1-amine		
<b>TLC Catalogue Number:</b>	A-182004		
<b>CAS Number:</b>	608141-42-0		
<b>Alternate CAS Number:</b>	N/A		
<b>Molecular Weight:</b>	273.35		
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>19</sub> NO <sub>4</sub> S		
<b>Source:</b>	TLC Pharmaceutical Standards		
<b>Source Lot No.:</b>	3968-044A1		
<b>Storage Conditions:</b>	Store at 2-8 °C		
<b>Solubility:</b>	Methanol, DMSO, DMF		

Test Description	Specifications	Results
<b>Visual Description</b>	White to off-white solid	<b>Conforms</b>
<b>Identification</b>		
IR	Conforms to structure	<b>Conforms</b>
MS	Conforms to structure	<b>Conforms</b>
<sup>1</sup> H NMR	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>100.0%</b>
<b>Impurity (HPLC)</b>	N/A	
<b>Purity (Chiral HPLC)</b>	Not less than 98.0%	<b>100.0%</b>
<b>Water Content (KF)</b>	N/A	<b>0.1%</b>
<b>Optical Rotation</b>	N/A	$[\alpha]_D^{25.0}(c=0.64, \text{CHCl}_3): +9.4^\circ$
<b>Residual Solvents (NMR)</b>	No residual solvent	
<b>Assay (%)</b>	Not less than 90.0%	<b>99.9%</b>
<b>Recommendation:</b>	<b>Release.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		05/21/2025
Approved by:	Quality Assurance		05/21/2025

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