

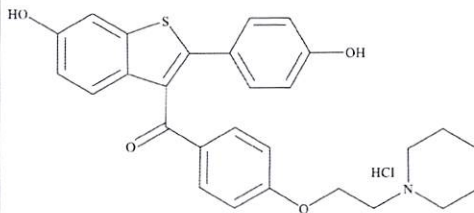
## Certificate of Analysis

Certificate No.: 20240614022

Date: June 14, 2024

Retest date: June 13, 2027

<b>Compound Name:</b> Raloxifene HCl	
<b>Synonyms:</b>	(6-hydroxy-2-(4-hydroxyphenyl)benzo[b]thiophen-3-yl)(4-(2-(piperidin-1-yl)ethoxy)phenyl)methanone, hydrochloride (1:1)
<b>TLC Catalogue Number:</b>	R-0111
<b>CAS Number:</b>	82640-04-8
<b>Molecular Weight:</b>	473.59 36.46
<b>Molecular Formula:</b>	C <sub>28</sub> H <sub>27</sub> NO <sub>4</sub> S. HCl
<b>Source:</b>	TLC Pharmaceutical Standards
<b>Source Lot No.:</b>	1272-079A1
<b>Storage Conditions:</b>	Store at 2-8 °C
<b>Solubility:</b>	Methanol, DMSO



Test Description	Specifications	Results
<b>Visual Description</b>	Yellow 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>Elemental Analysis</b>	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>99.4%</b>
<b>Impurity (HPLC)</b>	RT 20.32, 0.19%	
<b>Water Content (KF)</b>	N/A	<b>0.4%</b>
<b>Residue (TGA at 800 °C)</b>	N/A	<b>0.1%</b>
<b>Residual Solvents (NMR)</b>	0.1% methanol	
<b>Assay (%)</b>	Not less than 90.0%	<b>98.8%</b>
<b>Recommendation:</b>	<b>Release.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control	<i>Kelin Zhu</i>	06/17/2024
Approved by:	Quality Assurance	<i>Z. Ly</i>	06/17/2024

**Attachments:** HPLC, IR, MS, NMR and TGA spectra.