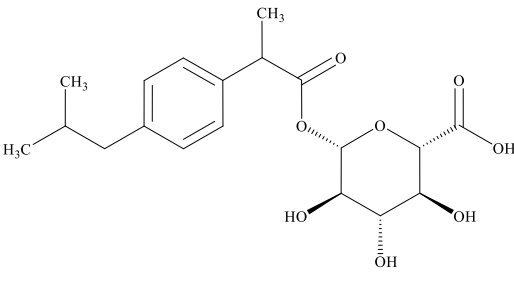


# Certificate of Analysis

Certificate No.: 20220214016

Date: February 14, 2022

Retest date: February 7, 2025

<b>Compound Name:</b>	<b>Ibuprofen Acyl Glucuronide (Mixture of Diastereomers)</b>	
<b>Synonyms:</b>	(2S,3S,4S,5R,6S)-3,4,5-trihydroxy-6-((2-(4-isobutylphenyl)propanoyl)oxy)tetrahydro-2H-pyran-2-carboxylic acid	
<b>TLC Catalogue Number:</b>	I-042	
<b>CAS Number:</b>	115075-59-7	
<b>Molecular Weight:</b>	382.41	
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>26</sub> O <sub>8</sub>	
<b>Source:</b>	TLC Pharmaceutical Standards	
<b>Source Lot No.:</b>	4872-020A3	
<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>		
<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>98.8%</b>
<b>Impurity (HPLC)</b>	RT 6.56, 0.31%; RT 7.16, 0.19%; RT 11.99, 0.19%	
<b>Water Content (KF)</b>	N/A	<b>2.1%</b>
<b>Residual Solvents (NMR)</b>	0.1% acetonitrile	
<b>Assay (%)</b>	Not less than 90.0%	<b>96.6%</b>
<b>Recommendation:</b>	<b>Release.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		
Approved by:	Quality Assurance		

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