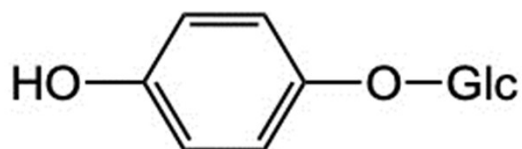


Certificate of Analysis

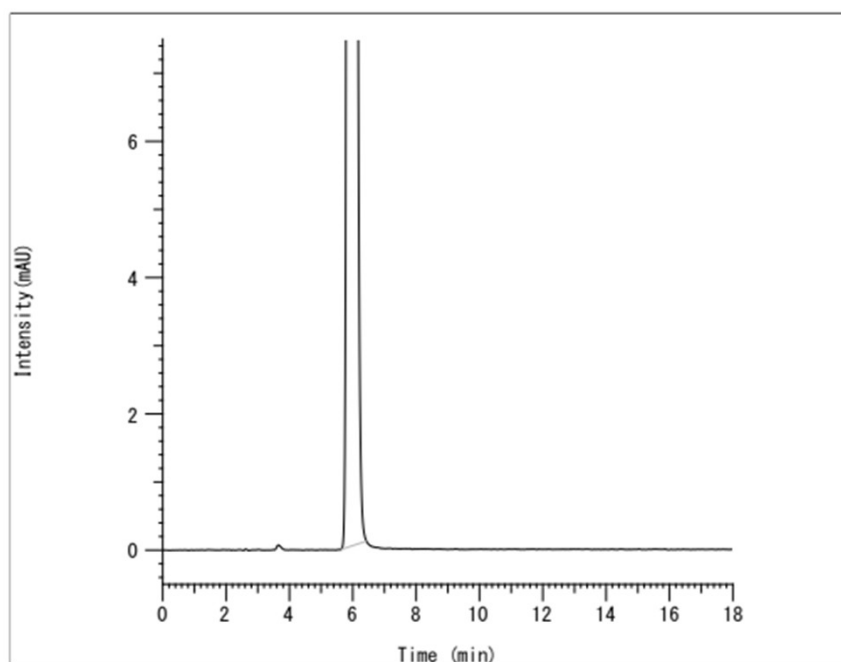
Product No.	03	Product Name	Arbutin
Lot. No.	032301	Unit Quantity	20mg
Analysis Date	2025-02-12	Storage Conditions	Room temperature


 $C_{12}H_{16}O_7$

MW : 272.25

CAS RN: 497-76-7

This product conforms to the specifications in the 18th edition of the Japanese Pharmacopoeia (Supplement I), Reagents, Test Solutions, "Arbutin for assay" and in the 18th edition of the Japanese Pharmacopoeia, Reagents, Test Solutions, "Arbutin for thin-layer chromatography".



Retention time	Peak area	%
5.947	2058349	100.00
Total	2058349	100.00

Area percentage	: Not less than 99.0%
Detector	: An ultraviolet absorption photometer (280 nm)
Column	: Wakosil- II 5C18 HG (φ 4.6 × 150mm)

Purity Related substances (HPLC)	Column temperature : A constant temperature of about 20°C. Mobile phase : A mixture of water, methanol and 0.1 mol/L hydrochloric acid TS (94 : 5 : 1) Flow rate : Adjust so that the retention time of arbutin is about 6 minutes. About 3 times as long as Time span of the retention time of measurement : arbutin, beginning after the solvent peak.	Passed (100.0%)
Assay (Purity value by quantitative NMR)		98.9%
Unity of peak		Passed
Description		Passed
Melting point (199~201°C)		Passed (201°C)
Absorbance $E_{1\text{cm}}^{1\%}$ (280nm) : 70 ~ 76		Passed (71)
Purity Related substances (TLC)		Passed
Water (by coulometric titration)		0.1%
Precautions Order quantities that can be used immediately, and after receipt of a reference standard, store it at the specified temperature and use it as soon as possible.		
Expiration Date	January 2026 (unopened)	

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