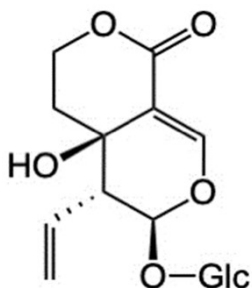


Certificate of Analysis

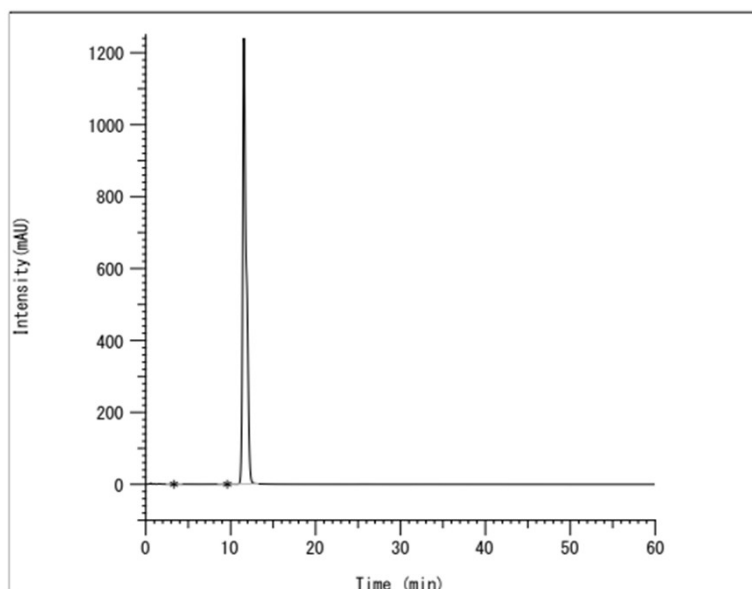
Product No.	19	Product Name	Swertiamarin
Lot. No.	192309	Unit Quantity	20mg
Analysis Date	2023-09-21	Storage Conditions	Refrigerate ($\leq 10^{\circ}$ C)

C₁₆H₂₂O₁₀

MW : 374.34

CAS RN: 17388-39-5

This product conforms to the specifications in the 18th edition of the Japanese Pharmacopoeia, Reagents, Test Solutions, " Swertiamarin for thin-layer chromatography".



Retention time	Peak area	%
3.183	42694	0.12
10.150	31665	0.09
11.563	36509677	99.79
Total	36584036	100.00

Area percentage : Not less than 99.0%

Detector : An ultraviolet absorption photometer (238nm)

Column : Wakosil- II 5C18 HG (4.6 × 150mm)

Purity Related substances (HPLC)	Column temperature : A constant temperature of about 50°C. Mobile phase : A mixture of water and acetonitrile (91 : 9) Flow rate : 0.7 mL per minute (the retention time of swertiamarin is about 12 minutes). Time span of measurement : About 5 times as long as swertiamarin, beginning after the solvent peak.	Passed (99.8%)
Description		Passed
Identification (IR)		Passed
Purity Related substances (TLC)		Passed
Absorbance $E_{1cm}^{1\%}$ (236nm) : 245~265		Passed (255)
Water (by coulometric titration)		7.0%
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	May 2027(unopened)	

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