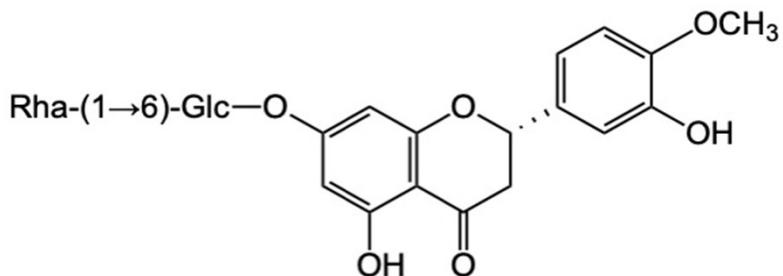


Certificate of Analysis

Product No.	33	Product Name	Hesperidin
Lot. No.	332406	Unit Quantity	20mg
Analysis Date	2024-06-04	Storage Conditions	Room temperature

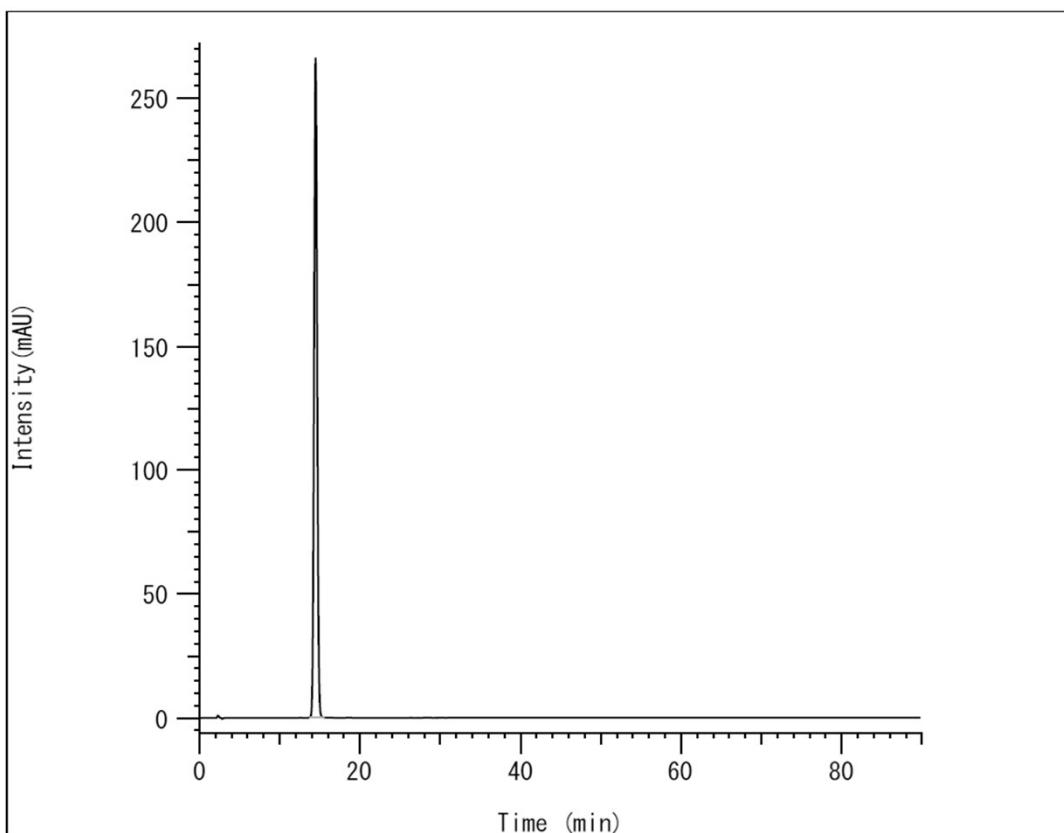


$\text{C}_{28}\text{H}_{34}\text{O}_{15}$

MW : 610.56

CAS RN: 520-26-3

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



Retention time	Peak area	%
14.470	7103134	100.00
Total	7103134	100.00

Detector	Area percentage	: Not less than 99.0%
		: An ultraviolet absorption photometer (285nm)

Purity Related substances (HPLC)	Column	Wakosil-II 5C18 HG (ϕ 4.6 × 150mm)	Passed (100.0%)
	Column temperature	of about 40°C.	
	Mobile phase	A mixture of water, acetonitrile and acetic acid (100) (82:18:1).	
	Flow rate	1.0 mL per minute (the retention time of hesperidin is about 15 minutes).	
	Time span of measurement	About 6 times as long as the retention time of hesperidin.	
Description		Passed	
Optical rotation $[\alpha]_D^{20} : -100 \sim -120^\circ$		Passed (-112°)	
Absorbance $E_{1cm}^{1\%}$ (284 nm) : 310 ~ 340		Passed (327)	
Purity Related substances (TLC)		Passed	
Water (by coulometric titration)		4.5%	
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	August 2026 (unopened)		

IWASHIMA YAKUHIN Co., Ltd.

4-201, Sakurazaka, Moriyama-ku, Nagoya City, Aichi Prefecture 463-0018, Japan

TEL : +81-52-715-5601

FAX : +81-52-715-5602