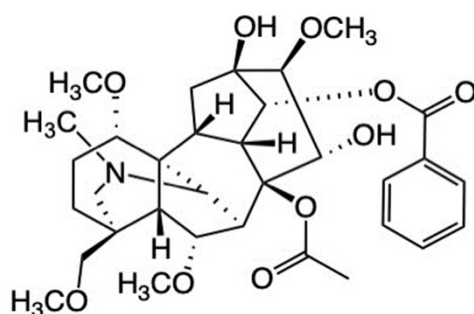


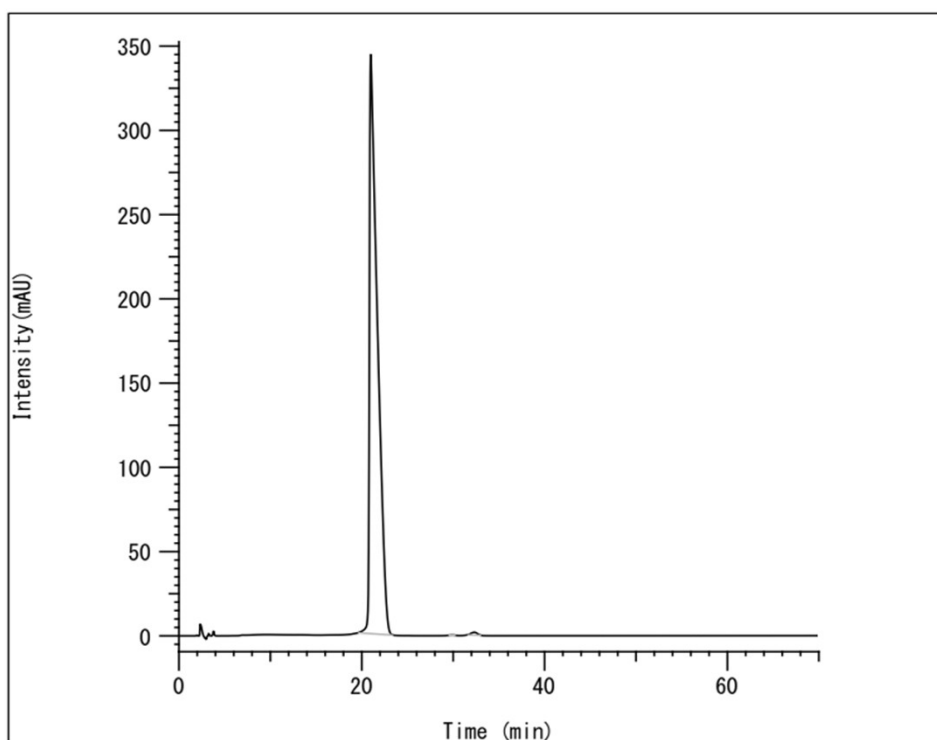
## Certificate of Analysis

Product No.	28	Product Name	<b>Hypaconitine</b>
Lot. No.	<b>282309</b>	Unit Quantity	20mg
Analysis Date	2023-09-28	Storage Conditions	Refrigerate ( $\leq 10^{\circ}$ C)



$C_{33}H_{45}NO_{10}$   
 MW : 615.71  
 CAS RN: 6900-87-4

This product conforms to the specifications in the 18th edition of the Japanese Pharmacopoeia, Reagents, Test Solutions, " Hypaconitine for purity".



Retention time	Peak area	%
20.980	20678232	99.60
29.900	5109	0.03
32.303	78792	0.38
Total	20762133	100.00

Area percentage	: Not less than 98.0%
Detector	: An ultraviolet absorption photometer (231nm)
Column	: Wakosil- II 5C18 HG ( $\phi$ 4.6 × 150mm)

Purity Related substances (HPLC)	Column temperature :	A constant temperature of about 40°C.	Passed (99.6%)
	Mobile phase :	A mixture of phosphate buffer solution for processed aconite root and tetrahydrofuran (9:1).	
	Flow rate :	Adjust so that the retention time of hypaconitine is about 23 minutes.	
	Time span of measurement :	About 3 times as long as the retention time of hypaconitine, beginning after the solvent peak.	
Description			Passed
Identification (IR)			Passed
Absorbance $E_{1cm}^{1\%}$ (230nm) : 217~262			Passed (227)
Purity Related substances (TLC)			Passed
Water (by coulometric titration) 1.0%以下			Passed (0.3%)
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 2028(unopened)	

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