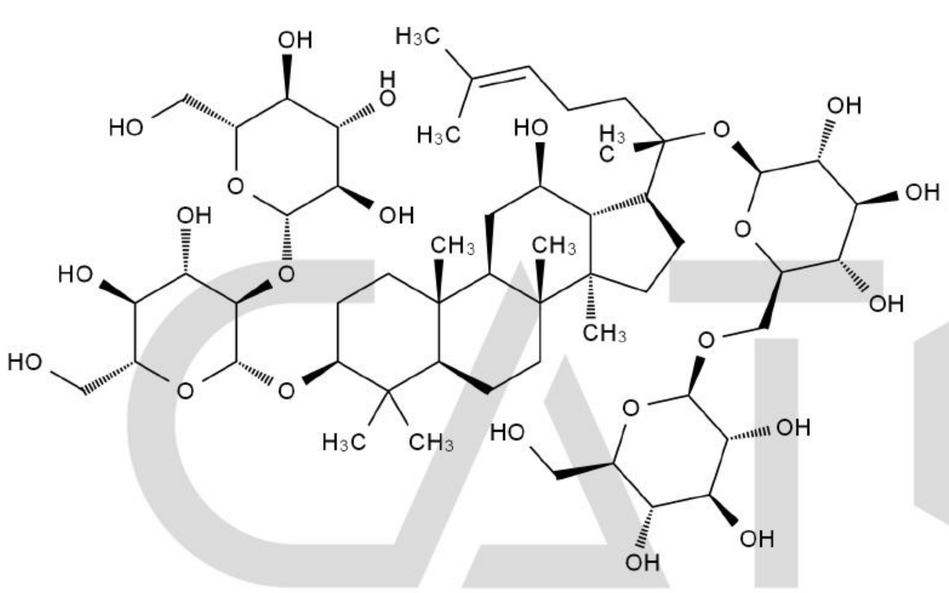
Certificate of Analysis

Reference Material & Standard

Product Name:	Ginsenoside Rb1	**Catalogue Number:**	CCPE900001
Synonyms:	N/A	**Lot Number:**	0922-RH-0032
CAS Number:	41753-43-9	**Expiry Date:**	Sep 23, 2030
Molecular Formula:	$C_{54}H_{92}O_{23}$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	1109.29	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	99.766%
Loss on Drying	TGA	6.7354%
Assay		93.0%
Uncertainty		±0.7%

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Comment:

1. The calculation of the mass balance method follows the formula (calculated on the non-dried basis):
*Assay (%) = (100%-Loss on Drying) * Purity ELSD (%) /100%*
Loss on Drying is considered as absolute effect, ELSD purity is considered as relative effect.
2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by: Alice Date: Sep 24, 2026

Reviewed by: Lisa Date: Sep 24, 2026

Approved by General Manager: David Date: Sep 24, 2026

CATO Research Chemicals Inc.