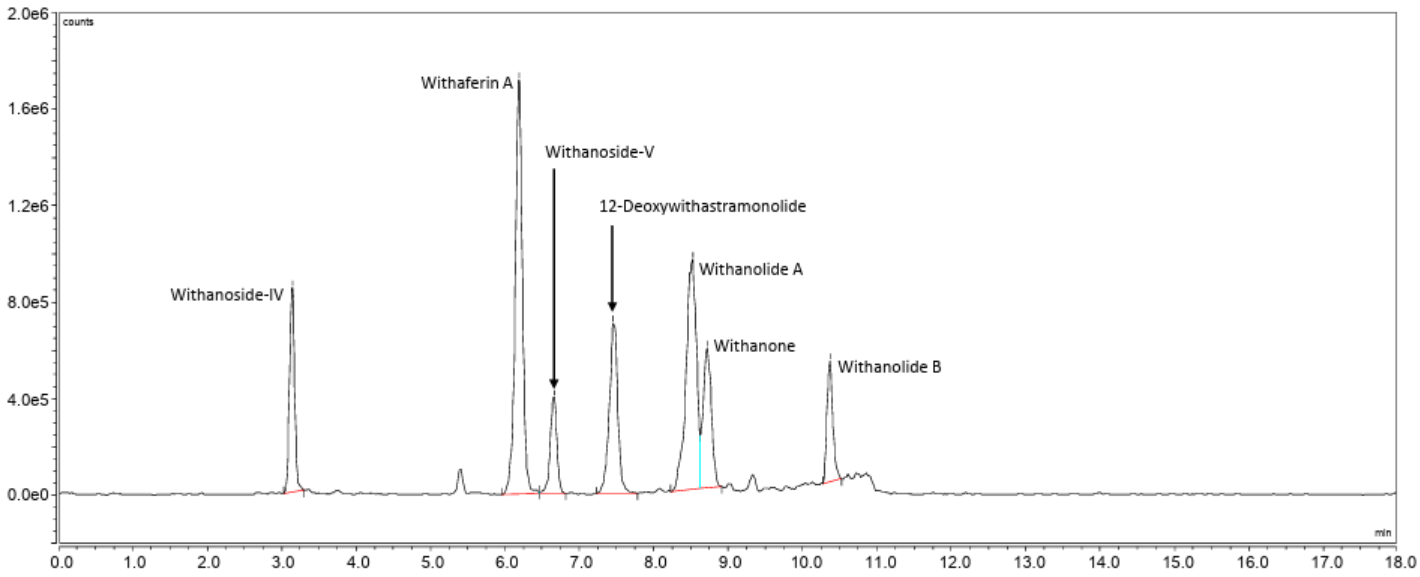
CERTIFICATE of ANALYSIS

Ashwagandha Analyte Mixture

Item No.:	46825
Batch No.:	0827527
Expiry Date:	03NOV2029 (valid from date of certification)
Supplied as:	A solution in 9:1 Methanol:Dimethyl sulfoxide; in deactivated glass ampule
Volume per Ampule:	Not less than 1 ml. Ampules are overfilled. It is advised that labs use measured volumes.
Storage & Handling:	Flammable. Store upright and unopened at -20°C. Warm to room temperature and homogenize/vortex before opening. Use promptly and return to cold storage when not in use.

Quality Information

Test	Specification	Result
Analyte Presence, LCMS	Identities confirmed	Pass



Approval: Title: Director, Analytical Chemistry Certification Date: 02NOV2026

Cayman Chemical certifies that this product meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiry date when stored unopened as recommended.

CERTIFICATE of ANALYSIS

Quality Control Table

Item No.	Item Name	RT (min)	Concentration (µg/ml)
11805	Withanoside-IV	3.13	250
11352	Withaferin A	6.18	250
11806	Withanoside-V	6.65	50
11669	Deoxywithastramonolide	7.46	50
11797	Withanolide A	8.50	250
11804	Withanone	8.74	50
11798	Withanolide B	10.36	50

HPLC Conditions	
Mobile Phase A: 0.1% Formic acid in Water	
Mobile Phase B: 0.1% Formic Acid in acetonitrile	
Gradient: 0-3 min 25-35%B; 3-8 min 35-40%B; 8-10 min 40-90%B, 10-12 min 90%B, 12.1-18 min 25%B	
Column: Poroshell 120 EC-C18 2.7 µm, 4.6 x 100 mm	Flow Rate: 1.2 ml/min
Positive Electrospray Ionization	Full Scan

CERTIFICATE of ANALYSIS

Revision History

Revision No.	Date	Reason for Revision
01	02NOV2026	Initial version

Disclaimers

Material Safety Data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some but not all of the information required for the safe and proper use of this material. Before use, review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

Warranty and Limitation of Remedy

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specification.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver of Buyer of all claims hereunder with respect to said material.
For further details, please refer to our Warranty and Limitations of Remedy located on our website and in our catalog.

This Certificate shall not be reproduced except in full, without written approval from the Cayman Chemical Company.

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