



July 12, 2023

Certificate of Analysis

Product Name: Actiponin® (Standardized Extract Powder of *Gynostemma pentaphyllum*)
Batch Number: ADN2307
Plant Species: *Gynostemma pentaphyllum*
Extraction Solvent: Ethanol and Water
Origin of Raw Material: China
Date of Analysis: July 11, 2023
Manufacturing Date: June 29, 2023
Part used: Leaf
Carrier Used: Maltodextrin
Manufacturing Country: Korea, Republic of
Expiration Date: June 28, 2025

TESTS	SPECIFICATIONS	RESULTS
<u>ORGANOLEPTIC</u>		
Appearance/Form	Drying fine powder	Conform
Color	Dark brown	Conform
Taste & Odor	Characteristic	Conform
<u>PHYSICO-CHEMICAL</u>		
Solubility	Soluble in Water(partly in ethanol)	Conform
Moisture	8.0% Max	Conform
Heavy Metals		
Lead	2.0 mg/kg Max	0.1 mg/kg
Arsenic	1.0 mg/kg Max	0.2 mg/kg
Mercury	0.5 mg/kg Max	0.0 mg/kg
Cadmium	1.0 mg/kg Max	0.1 mg/kg
Determined Damulin A	By HPLC	Conform
Damulin A Content	80~120% of declared quantity(12.0 mg/g)	117% (14.0 mg/g)
<u>MICROBIOLOGICAL</u>		
Total Plate Count	<1,000 cfu/g	Conform
E.Coli	Negative	Negative

Comments:

- The above product has been analyzed by TG BIOTECH and/or its contract testing laboratory. Analytical results on a representative sample from this batch show that this product meets the above criteria.
- Best if used before the date listed above when stored in tightly closed containers in a cool dry place away from light.

Approved by Jieun Kim

Quality Control Manager, TG Biotech Co., Ltd.