Certificate Issued To: Lost Empire Herbs 8301 NW 101st Ter. Kansas City, MO 64153-2321 Untied States



Work performed at: **Alkemist Labs**

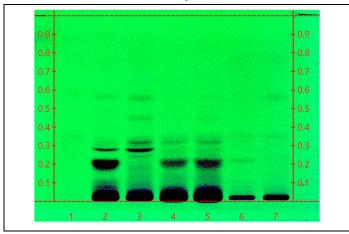
12661 Hoover Street Garden Grove, CA 92841 714-754-HERB (4372) 714-668-9972 (FAX) Sales@Alkemist.com www.Alkemist.com

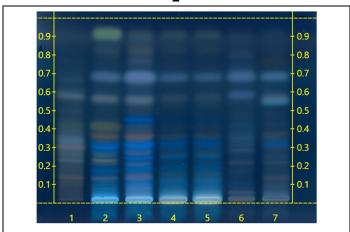
Report Date: 02/27/23

Certificate of Analysis: Lion's Mane (BLION19JAN23)

High Performance Thin-Layer Chromatography with Photo-Documentation

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Company Name: Lost Empire Herbs Title: Lion's Mane Flant Part: fruiting body Sample Received: 02/21/23

Sample Packaging: Clear Reclosable Plastic Bag

Form of Botanical: powdered extract

Appearance: Ultrafine yellowish brown powder
Lot Number: (BLION19JAN23) →Lanes 4(10μl), 5(12μl)

Sample: 23052PWJ_1 Latin Name: Hericium erinaceus

Reference Sample: Lane 2(8µI) (19077JDF), Lane 3(8µI) (ABI12113NAMX1) Hericium erinaceus (fruiting body); Lane 6(8µI)

(ABI19317FPM1) Hericium erinaceus (mycelia); Lane 7(8µI) (19144JHW) Trametes versicolor (fruiting body); held at

Alkemist Labs, Garden Grove, CA.

Analyst: A.Foults, D.Robinson, J.Mares, K.Chopra, K.Montoya, K.Tran, L.Tang, M.Fox, N.Alvarez, N.Hoang, N.Afendikova,

N.Waldstreicher, P.Hoang, S.Kabbaj, S.Sudberg 194827

Sample Preparation: 0.3g+3mL 70% grain Ethanol, sonicate/heat at 50° C for 30 min.

Stationary Phase: Silica gel 60, HPTLC plates

Mobile Phase: toluene: ethyl formate: Formic Acid [5/5/0.2]

Detection: (1) UV 254 nm

(2) 10% Sulfuric, 100°C, 2min, 366nm (Reich, E., 2007)

Reference Standard: Lane 1(3µI) Ergosterol (4S4BA-MC, VWR), Methanol (22E0661031, VWR)

Reference Source: Method Developed by Alkemist Labs

IDT-SOP-72-01

<u>Comments & Conclusions:</u> Lanes 4, 5 are the test sample Lion's Mane (BLION19JAN23) Lanes 2, 3, 6, 7 are the reference samples used for comparison. This test sample, Lion's Mane (BLION19JAN23), has characteristics of the chromatographic profile of *Hericium erinaceus* reference samples used above. This test sample Lion's Mane (BLION19JAN23) indicates the presence of *Hericium erinaceus* fruiting body.

NOTE: The above conclusion may be a function of the natural variance found in botanicals &/or the extraction process used to create specific extracts. The growing and drying conditions, age, seasonal variations, geographic location, extraction solvents, etc. all play a role in the phytochemical fingerprint of botanicals as well as their extracts; hence, chromatographic variations are expected.

Examined, Reviewed & Authorized by: Syhem W Kabbaj, HPTLC Production Supervisor, Alkemist Labs

ACCREDITED
CERTIFICATE #3851.01

ISO/IEC 17025

Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to BLION19JAN23.

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