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



Work performed at: **Alkemist Labs**

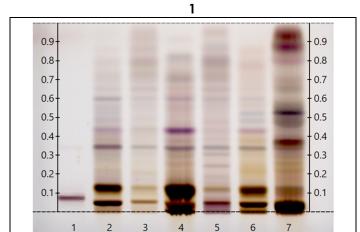
12661 Hoover Street Garden Grove, CA 92841

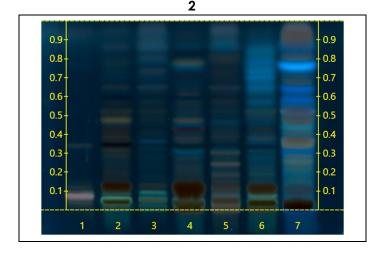
714-754-HERB (4372) 714-668-9972 (FAX) Sales@Alkemist.com www.Alkemist.com

Report Date: 01/12/23

<u>Certificate of Analysis:</u> Eleuthero (BEL19DEC22)

High Performance Thin-Layer Chromatography with Photo-Documentation





Company Name: Lost Empire Herbs
Title: Eleuthero
Plant Part: root & stem
Sample Received: 01/06/23

Sample Packaging: Clear Reclosable Plastic Bag

Form of Botanical: powdered extract
Appearance: brown fine powder
Lot Number: (BEL19DEC22) →Lane 4(8μI)

Lot Number: (BEL19DEC2: Sample: 23006HMJ 1

Sample Preparation:

Latin Name: Eleutherococcus senticosus (Rupr. & Maxim.) Maxim. [Araliaceae]

Reference Sample: Lane 2(8µI) (NF22218AHP2), Lane 3(8µI) (NF22509PB) Eleutherococcus senticosus (root); Lane 6(4µI) (TH13112SWH1)

Acanthopanax gracilistyla (root bark); Lane 7(4µI) (19164HOC) Periploca sepium (root); 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 191788 0.3g+3mL Methanol, sonicate/heat at 50°C for 30 min.

Stationary Phase: Silica gel 60, HPTLC plates

Mobile Phase: chloroform: methanol: water [7/3/0.4]

Detection: (1) 10% Sulfuric, 100°C, 2min, Vis (Reich, E., 2007) (2) 10% Sulfuric, 100°C, 2min, 366nm (Reich, E., 2007)

Reference Standard: Lane 1(3µl) Escin (BCCC9208, SigAl), Methanol (216546, FC)

Reference Source: BTM-715-0085

IDT-SOP-72-01

<u>Comments & Conclusions:</u> Lane 4 is the test sample Eleuthero (BEL19DEC22) Lanes 2, 3, 6, 7 are the reference samples used for comparison. This test sample, Eleuthero (BEL19DEC22), has characteristics of the chromatographic profile of *Eleutherococcus senticosus* reference samples used above. This test sample Eleuthero (BEL19DEC22) indicates the presence of *Eleutherococcus senticosus* root.

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 BEL19DEC22.

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