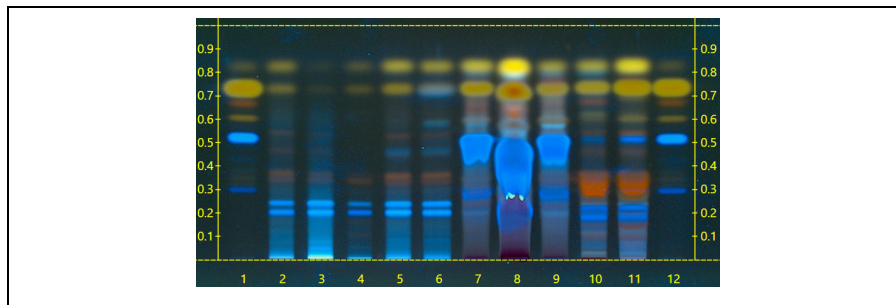


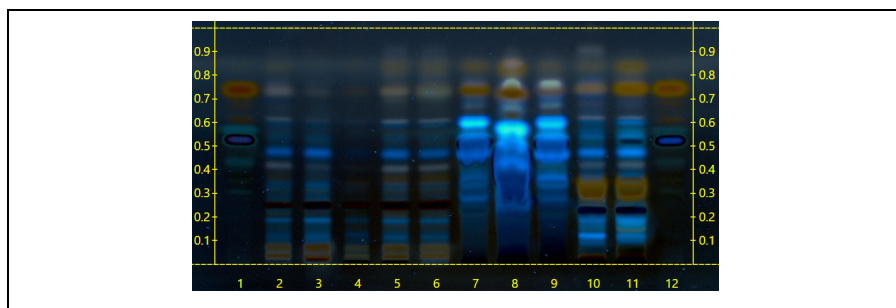


Certificate of Analysis: HE SHOU WU (HS190321)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name: Lost Empire Herbs
Title: HE SHOU WU
Plant Part: root
Appearance: fine brown powder
Sample Packaging: Clear Reclosable Plastic Bag

Sample Received: 04/09/21
Form of Botanical: powdered extract
Lot Number: (HS190321) → Lane 4(0.5µl)
Sample: 21099BXE_1

Latin Name: *Polygonum multiflorum* Thunb. [Polygonaceae]
Reference Sample: Lane 2(3µl) (BJ10910CRB), Lane 3(3µl) (BJ12310MRH) *Polygonum multiflorum* (root); Lane 10(3µl) (OQ24808CHR) *Polygonum cuspidatum* (rhizome); Lane 11(3µl) (OQ11109SWH) *Polygonum cuspidatum* (root & rhizome); held at Alkemist Labs, Garden Grove, CA.

Analyst: A. Davis, N. Afendikova, M. Edwards, S. Kabbaj, N. Hoang, K. Tran, J. Lopez, J. Mares 153852

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

Stationary Phase: Silica gel 60, HPTLC plates

Mobile Phase: toluene: Ethanol: Acetic acid: develop to 3.5cm, then run w: toluene: Ethanol: to the mark [8/6/1//8/2/]

Detection: (1) UV 366 nm

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

Reference Standard: Lanes 1(3µl) and 12(3µl) Resveratrol (18090-014, CHR), Emodin (0453S, XSYN), Methanol (0000206696, VWR)

Reference Source: Method Developed by Alkemist Labs
IDT-SOP-72-01

Comments & Conclusions: Lane 4 is the test sample HE SHOU WU (HS190321). Lanes 2, 3, 10, 11, are the reference samples used for comparison. This test sample, HE SHOU WU (HS190321) is consistent with the chromatographic profile of the reference samples of *Polygonum multiflorum*, used above. **This test sample HE SHOU WU (HS190321) has characteristics of *Polygonum multiflorum* 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: Khanh N Tran, HPTLC, R&D Supervisor, Alkemist Labs

Report Date: 04/14/21



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to HS190321. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report is for the exclusive use of the party who requested the report and not for public dissemination or use by third parties, including for promotional purposes, without the prior written permission of Alkemist Labs, Inc. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void. © 2021 Alkemist Labs, Inc. All Rights Reserved