

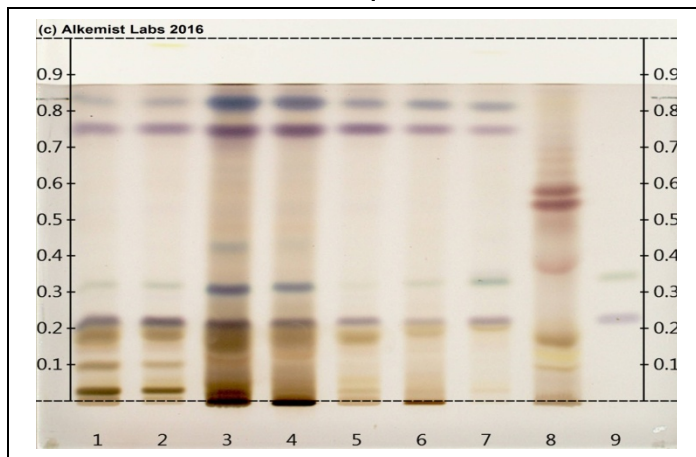
Certificate Issued To:
Superman Herbs
2825 S. Rodeo Gulch Rd #12
Soquel, CA 95073



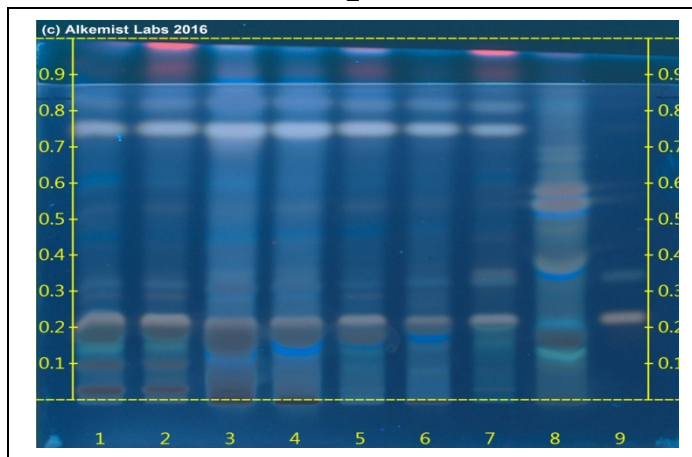
Work performed at:
Alkemist Labs
1260 Logan Ave B2
Costa Mesa, CA 92626
714-754-HERB (4372)
714-668-9972 (FAX)
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Certificate of Analysis: Gotu Kola (Gk0826)
High Performance Thin-Layer Chromatography with Photo-Documentation

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2



Company Name: Superman Herbs
Title: Gotu Kola
Plant Part: leaf
Sample Received: 09/01/16
Sample Description: Clear Reclosable Plastic Bag
Form of Botanical: powdered extract
Appearance: brown fine powder
Lot : (Gk0826) → Lane 7(0.5µl)
Sample : DA24516SUP1_1
Latin Name: Centella asiatica (L.) Urb. [Apiaceae]
Reference Sample : Lane 1(3µl) (DA20109CRB) Centella asiatica (aerial part); Lane 2(3µl) (DA20809MBS) Centella asiatica (aerial part); Lane 3(3µl) (DA19716FLI2) Centella asiatica (leaf); Lane 8(3µl) (UL21010CRB) Bacopa monnieri (herb); held at Alkemist Labs, Costa Mesa, CA.
Analyst: J. Nguyen, N. Hoang, P. Fast, S. Kabbaj, K. Tran 74166
Sample Prep: 0.3g+3mL CH₃OH sonicate/heat @ -50° C ~ 1/2 hr.
Stationary Phase: Silica gel 60, F₂₅₄, HPTLC plates
Mobile Phase: CH₂Cl₂: CH₃OH: H₂O [7/3/0.5]
Detection: (1) 10% Ethanolic H₂SO₄ → 120° C 10 min → visible light
(2) 10% Ethanolic H₂SO₄ → 120° C 10 min → UV 365 nm
Reference Std: Lane 9(3µl) Madecassoside (ASB-00013015-010 CDX), Methanol (072815B, VWR), Asiaticoside (1043331 USP), Methanol (072815B, VWR) ~0.1%
Reference Source: HPTLC ASSOCIATION
IDT-SOP-72-01

Comments & Conclusions: Lane 7 is the test sample Gotu Kola (Gk0826). Lanes 1, 2, 3, 8 are the reference samples used for comparison. This test sample, Gotu Kola (Gk0826), is consistent with the chromatographic profile of the reference samples of Centella asiatica (L.) Urb. [Apiaceae], used above. **This test sample, Gotu Kola (Gk0826) has characteristics of an extract derived from Centella asiatica (L.) Urb. [Apiaceae] leaf.**

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: Sandy Sudberg, Senior Data Analyst, Alkemist Labs

Report Date: 09/09/16



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to Gk0826. 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. © 2016 Alkemist Labs, Inc. All Rights Reserved