

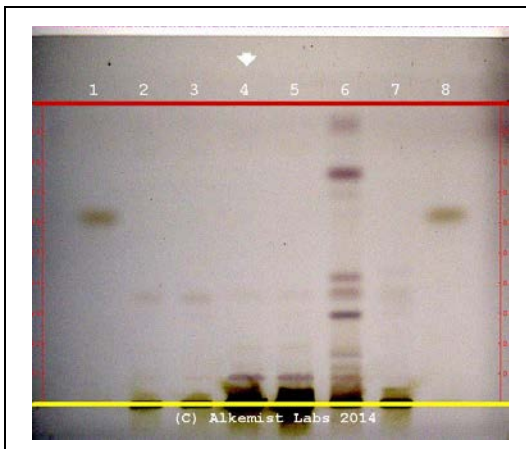
Certificate Issued To:  
**Superman Herbs**  
1226 Mission Street  
Santa Cruz, CA 95060  
USA



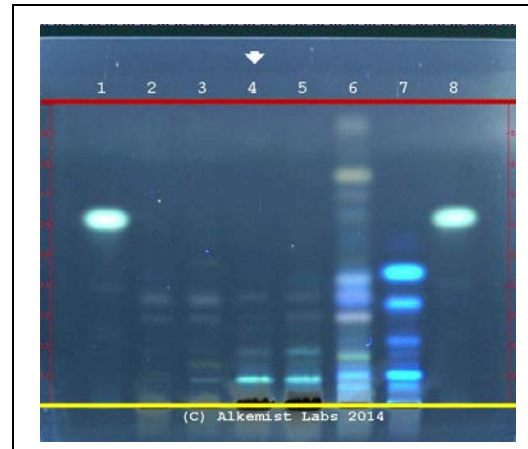
Work performed at:  
**Alkemist Labs**  
1260 Logan Ave B2  
Costa Mesa, CA 92626  
714-754-HERB (4372)  
714-668-9972 (FAX)  
E-mail: sales@alkemist.com  
Web Site: www.alkemist.com

**Certificate of Analysis: Angelica (206)**  
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name: Superman Herbs  
Title: Angelica  
Plant Part: root  
Sample Received: 9/8/2014  
Sample Description: Clear Reclosable Plastic Bag  
Form of Botanical: powdered extract  
Appearance: Fine light yellow powder  
Lot : (206) → Lane 4(8µl)  
Sample : SA25114SUP1\_1  
Latin Name: Angelica sinensis (Oliv.) Diels [Apiaceae]  
Reference Sample : Lane 2(8µl) (SA11109SWH1) Angelica sinensis (root); Lane 3(8µl) (SA11109MYWY) Angelica sinensis (root); Lane 6(8µl) (RT17604HEP) Levisticum officinale (root); Lane 7(4µl) (JG12104BH) Angelica archangelica (root); authenticated by macroscopic, microscopic &/or TLC studies according to the reference source cited below, held at Alkemist Labs, Costa Mesa, CA.  
Analyst: JN, ML, JK, CB 48445  
Sample Prep: 0.3g+3mL CH<sub>3</sub>OH sonicate/heat @-50° C ~ 1/2 hr.  
Stationary Phase: Silica gel 60, F<sub>254</sub>, 10 x 10 cm HPTLC plates  
Mobile Phase: toluene: ethyl acetate: formic acid [9/1/0.1]  
Detection: (1) 10% Ethanolic H<sub>2</sub>SO<sub>4</sub> → 120° C 10 min → visible light  
(2) 10% Ethanolic H<sub>2</sub>SO<sub>4</sub> → 120° C 10 min → UV 365 nm  
Reference Std: Lanes 1(3µl) and 8(3µl) Ligustilide (00012180-6591, CHR) ~0.1% in CH<sub>3</sub>OH  
Reference Source: Method Developed by Alkemists Laboratories  
SOP-700-0001-R3

**Comments & Conclusions:** Yellow line = sample origin @ 10mm, red line = solvent front @ 70mm. Lane 4 is the test sample Angelica (206). Lanes 2, 3, 6, 7 are the authenticated reference samples used for comparison. This test sample, Angelica (206), is consistent with the chromatographic profile of the reference samples of Angelica sinensis (Oliv.) Diels [Apiaceae], used above. **This test sample, Angelica (206) is characteristic of an extract derived from Angelica sinensis (Oliv.) Diels [Apiaceae] 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: Sandy Sudberg, Administrative Supervisor, Alkemist Labs

Report Date: 9/15/2014

Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to 206. 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 Pharmaceuticals, 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. © 2014 Alkemist Labs, Inc. All Rights Reserved