

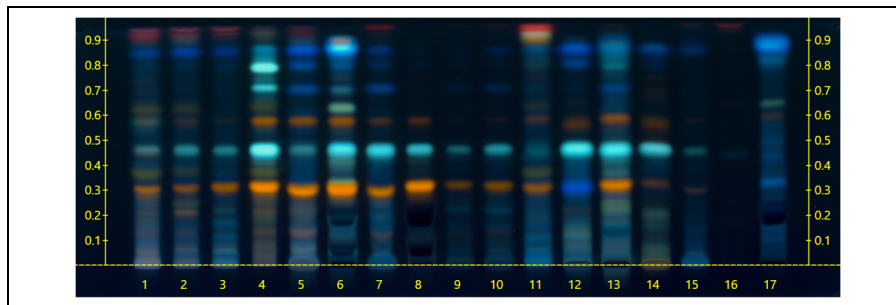
Certificate Issued To:
Lost Empire Herbs
8301 NW 101st Ter.
Kansas City, MO 64153-2321
United States



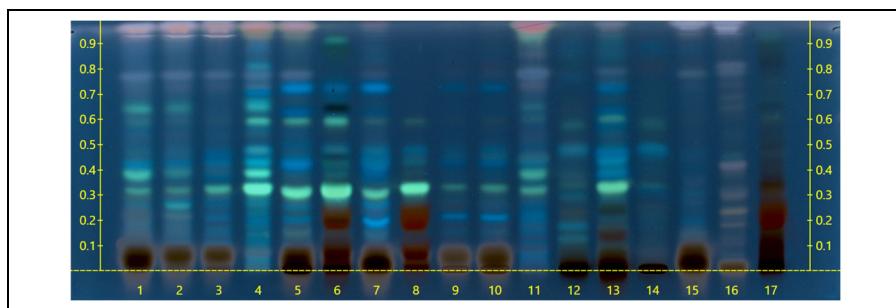
Work performed at:
Alkemist Labs
12661 Hoover Street
Garden Grove, CA 92841
714-754-HERB (4372)
714-668-9972 (FAX)
Sales@Alkemist.com
www.Alkemist.com

Certificate of Analysis: Elder Berry (BELDR22MAY23)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name: Lost Empire Herbs
Title: Elder Berry
Plant Part: juice
Appearance: dark purple powder
Sample Packaging: Clear Reclosable Plastic Bag

Sample Received: 08/07/23
Form of Botanical: powdered extract
Lot Number: (BELDR22MAY23) → Lane 8(0.5µl)
Sample: 23219BUR_1

Latin Name: *Sambucus nigra* L. [Viburnaceae]
Reference Sample: Lane 1 (3µl) (KRQ31113HH1) *Sambucus cerulea* (fruit); Lane 2 (3µl) (21015KUQ) *Sambucus ebulus* (fruit); Lane 3 (3µl) (22349UKN) *Sambucus canadensis* (fruit); Lane 4 (1µl) (PD17113BDS1) *Sambucus nigra* (flower); Lane 5 (3µl) (PD26418HH1), Lane 6 (0.5µl) (PD24515NC1) *Sambucus nigra* (fruit); Lane 12 (3µl) (GP21909SPB) *Aronia melanocarpa* (fruit); Lane 13 (8µl) (22322HMK) *Prunus avium* (fruit); Lane 14 (3µl) (L11409SYN) *Vaccinium macrocarpon* (fruit); Lane 15 (3µl) (21068URO) *Morus nigra* (fruit); Lane 16 (3µl) (CQ28115LWF1) *Glycine max* (bean); Lane 17 (0.5µl) (20220YFH) *Oryza sativa* (grain); 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 206485

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

Stationary Phase: Silica gel 60, HPTLC plates

Mobile Phase: ethyl acetate: Acetic acid: formic acid: water [10/0.9/0.9/2]

Detection: (1) Natural Product + Polyethylene Glycol, 366nm (Reich, E., 2007)

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

Reference Source: Method Developed by Alkemist Labs

IDT-SOP-72-01

Comments & Conclusions: Lane 8 is the test sample Elder Berry (BELDR22MAY23) Lanes 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 17 are the reference samples used for comparison. This test sample, Elder Berry (BELDR22MAY23), is consistent with the chromatographic profile of the reference samples of *Sambucus nigra* used above. **This test sample Elder Berry (BELDR22MAY23) has characteristics of a customized extract derived from *Sambucus nigra* juice.**

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: 08/11/23



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to BELDR22MAY23.
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