

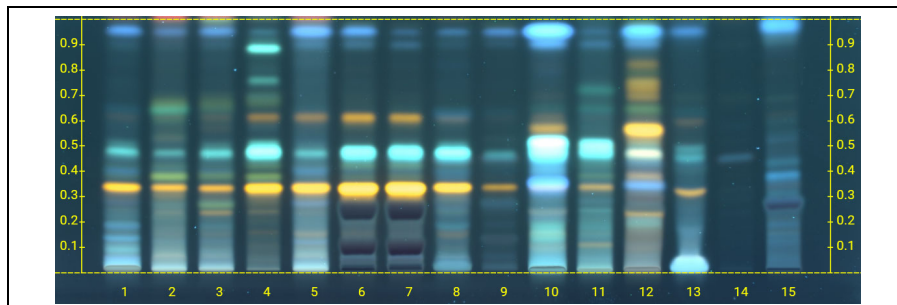
Certificate Issued To:
Lost Empire Herbs
8301 NW 101st Ter.
Kansas City, MO 64153-2321
United States



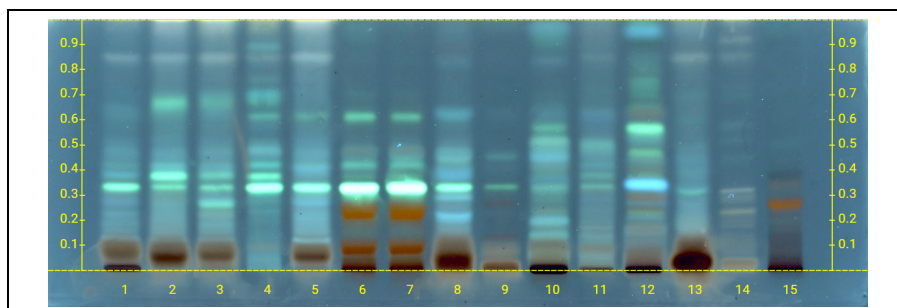
Work performed at:
Alkemist Labs
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Certificate of Analysis: Elder Berry (BELDR03APR24)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name:	Lost Empire Herbs	Sample Received:	04/08/24
Title:	Elder Berry	Form of Botanical:	powdered extract
Plant Part:	juice	Lot Number:	(BELDR03APR24) → Lane 7 (0.5µl)
Appearance:	Ultrafine dark purple powder	Sample:	24099ECF_1
Sample Packaging:	Clear Reclosable Plastic Bag		

Latin Name: *Sambucus nigra* L. [Viburnaceae]
Reference Sample: Lane 1 (3µl) (22349UKN) *Sambucus canadensis* (fruit); Lane 2 (3µl) (KRQ26418HH1) *Sambucus cerulea* (fruit); Lane 3 (3µl) (21015KUQ) *Sambucus ebulus* (fruit); Lane 4 (1µl) (PD17113BDS1) *Sambucus nigra* (flower); Lane 5 (3µl) (PD29413HH1), Lane 6 (0.5µl) (PD24515NC1) *Sambucus nigra* (fruit); Lane 10 (5µl) (GP21909SPB) *Aronia melanocarpa* (fruit); Lane 11 (5µl) (CAR01813TIS1) *Prunus avium* (fruit); Lane 12 (3µl) (LQB15918AP1) *Vaccinium macrocarpon* (fruit); Lane 13 (3µl) (21068URO) *Morus nigra* (fruit); Lane 14 (3µl) (CQ28115LWF1) *Glycine max* (bean); Lane 15 (0.5µl) (20220YFH) *Oryza sativa* (grain); held at Alkemist Labs, Garden Grove, CA.

Analyst: N.Afendikova, N.Alvarez, K.Chopra, J.Congjuico, A.Foults, A.Hernandez, N.Hoang, R.Islam, S.Kabbaj, J.Mares, M.Nguyen, S.Sudberg, L.Tang, K.Tran 226423

Sample Preparation: 1g+10mL water, sonicate/heat at 50°C for 30 min. SPE condition with 5mL Methanol, equilibrate with 5mL water, load, dry, elute with 1mL Methanol(2x)

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 7 is the test sample Elder Berry (BELDR03APR24) Lanes 1, 2, 3, 4, 5, 6, 10, 11, 12, 13, 14, 15 are the reference samples used for comparison. This test sample, Elder Berry (BELDR03APR24), is consistent with the chromatographic profile of the reference samples of *Sambucus nigra* used above. **This test sample Elder Berry (BELDR03APR24) 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: Nam Hoang, HPTLC, R&D Lead Chemist, Alkemist Labs

Report Date: 04/15/24



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to BELDR03APR24.

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