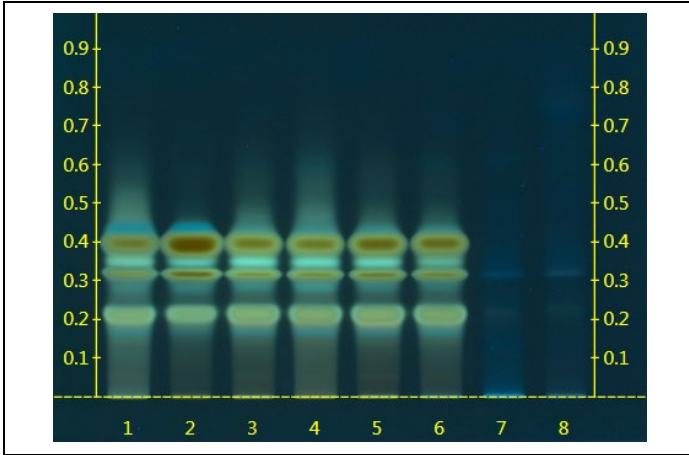


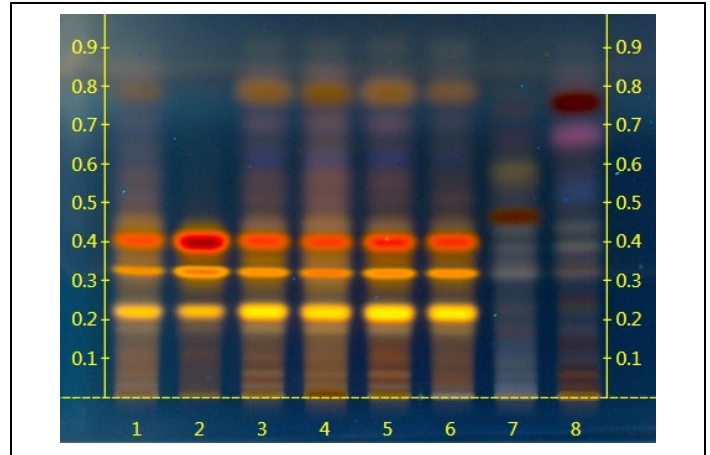


Certificate of Analysis: Turmeric Powdered Extract (1234567)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name: Dietary Supplement Company
Title: Turmeric
Plant Part: rhizome
Sample Received: 07/25/21
Sample Packaging: Clear Whirl-Pak
Form of Botanical: crude plant powder
Appearance: Orange granulated powder
Lot Number: (1234567) → Lane 3(2µl)
Sample: Turmeric Powdered Extract
Latin Name: *Curcuma longa* L. [Zingiberaceae]
Reference Sample: Lane 1(2µl) (SF26610SWH), Lane 2(2µl) (SF04914NC3) *Curcuma longa* (root); Lane 7(2µl) (KTQ15915SWH1) *Curcuma zedoaria* (rhizome); Lane 8(2µl) (KTU04214SWH2) *Curcuma phaeocaulis* (root); held at Alkemist Labs, Garden Grove, CA.

Analyst: A. Davis, J. Kim, N. Afendikova, M. Edwards, S. Rodriguez, S. Kabbaj, M. Lababidi, N. Hoang, K. Tran 125445

Sample Preparation: 0.3g+3mL Methanol, sonicate/heat at 50°C for 30 min.
Stationary Phase: Silica gel 60, HPTLC plates
Mobile Phase: chloroform: ethanol: Acetic acid [9.5/0.5/0.1]
Detection: (1) UV 366 nm
(2) Vanillin/Sulfuric, 110°C, 2min, 366nm (Reich, E., 2007)

Reference Source: TS1-3: BTM-715-0009, TS4: BTM-715-0153
IDT-SOP-72-01



Comments & Conclusions: Lane 3 is the test sample Turmeric Powdered Extract (1234567). Lanes 1, 2, 7, 8, are the reference samples used for comparison. This test sample, Turmeric Powdered Extract (1234567) is consistent with the chromatographic profile of the reference samples of *Curcuma longa*, used above. **This test sample Turmeric Powdered Extract (1234567) has characteristics of *Curcuma longa* rhizome.**

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: 08/01/21



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to 001616ST. 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. © 2019 Alkemist Labs, Inc. All Rights Reserved