



Certificate of Analysis: Ginseng Dry Extract (0100410401)

Botanical Nomenclature:	<i>Panax ginseng</i>
Common name:	Asian ginseng
Plant Part:	Leaf
Method:	BTM 715-0574
Analysis by:	J.Mares, K.Montoya, K.Tran, M.Levine, N.Carson, N.Hoang, N.Afendikova, S. Kabbaj, S.Sudberg, L.Tang, D.Robinson 185057

Results:

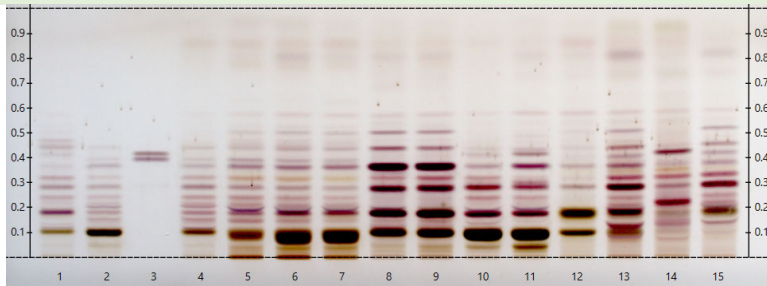


Plate Image 1: Derivatized with 10% Sulfuric acid Reagent, visible light

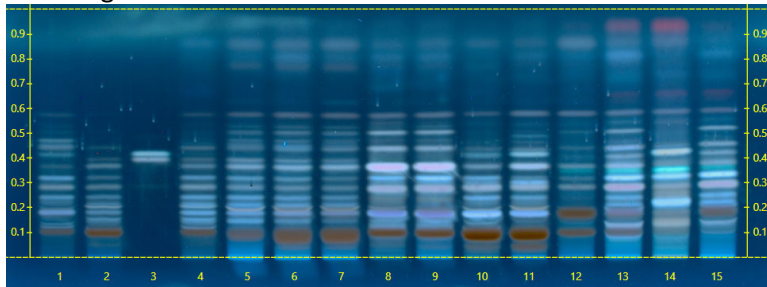


Plate Image 2: Derivatized with 10% Sulfuric acid Reagent, UV 366 nm

Plate Images 1-2 Track Assignment

Track	Sample	Part	Sample#	µL
1	<i>Panax quinquefolius</i>	root	USP lot F0F323	2
2	<i>Panax ginseng</i>	root	USP lot R116W	2
3	Ginsenoside Rf, Pseudoginsenoside F11	N/A	Sigma Aldrich lot 118119843, lot BCCC6136	1
4	<i>Panax ginseng</i>	root	22229FZJ_1	1
5	<i>Panax ginseng</i>	root	EA14015KAN1	2
6	<i>Panax ginseng</i>	root	EA30009CRB	2
7	<i>Panax ginseng</i>	root	19066XMZ	2
8	<i>Panax notoginseng</i>	root	19084ELA	2
9	<i>Panax notoginseng</i>	root	VE15305SWH	2
10	<i>Panax quinquefolius</i>	root	LA20508AHP4	2
11	<i>Panax quinquefolius</i>	root	LA14609CRB2	2
12	<i>Panax ginseng</i>	leaf	EA12308NTX	2
13	<i>Panax ginseng</i>	leaf	EA02518BTT1	2
14	<i>Panax quinquefolius</i>	leaf	LA08905BMX	2
15	<i>Panax quinquefolius</i>	leaf	LA10805BIN1	2

Comments and Conclusions: Lane 4 is the test sample Ginseng Dry Extract (0100410401). Lanes 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, are the reference samples used for comparison. This test sample, Ginseng Dry Extract (0100410401) is consistent with the chromatographic profile of the reference samples of *Panax ginseng* root. **This test sample Ginseng Dry Extract (0100410401) has characteristics of *Panax ginseng* 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.