

Certificate of Analysis

For Laboratory Use Only

PRODUCT	<i>Mahonia aquifolium</i> (Oregon Grape) Root
PART NUMBER	00030645
REFERENCE TYPE	Biomass Reference Material (VBRM) *
LOT NUMBER	00030645-119
COMMON NAME	Oregon Grape
LATIN NAME	<i>Mahonia aquifolium</i> (Pursh) Nutt. [Berberidaceae]
PLANT PART	Root
CDXA NUMBER	CDXP-19-00108
REPORT NUMBER	CDXA-VBRMR-196-00
DATE OF SAMPLE	02/12/2019
DATE OF REPORT	03/05/2019

*Note – Vouchered (V) BRM is a voucher specimen

A full-size color voucher copy may be purchased by contacting the ChromaDex sales office



ANALYTICAL RESULTS

TEST	METHOD	RESULT
Appearance	Macroscopy	(1) Whole/Cut: Light brown bark with yellow cork (2) Milled: Yellow fibers with black grains
Anatomy/Morphology	Microscopy	(1) Bordered-pitted vessel and pitted fibers with calcium oxalate crystals in secondary phloem (x100) (2) Secondary xylem consisting of vessels, fibers, and pitted ray parenchyma (x400)
HP-TLC	CDXA-TLCM-365-00	Conforms

STORAGE CONDITIONS

STORAGE	20-30 °C; Dry storage area; Insect free; Volatile free
EXPIRATION DATE	02/2024 under the above conditions

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MACROSCOPY

(1)

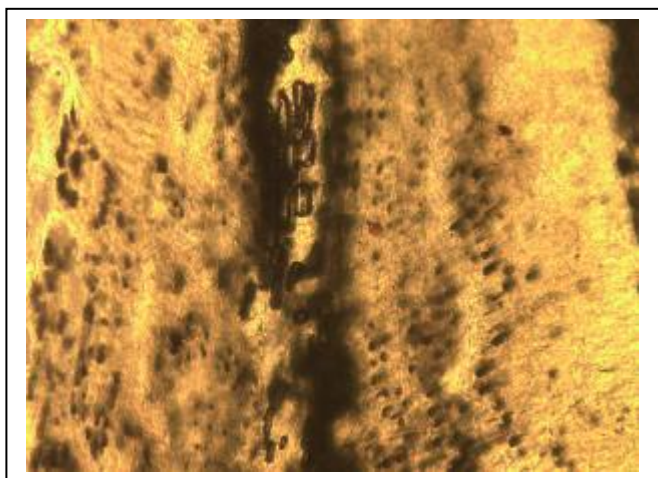


(2)

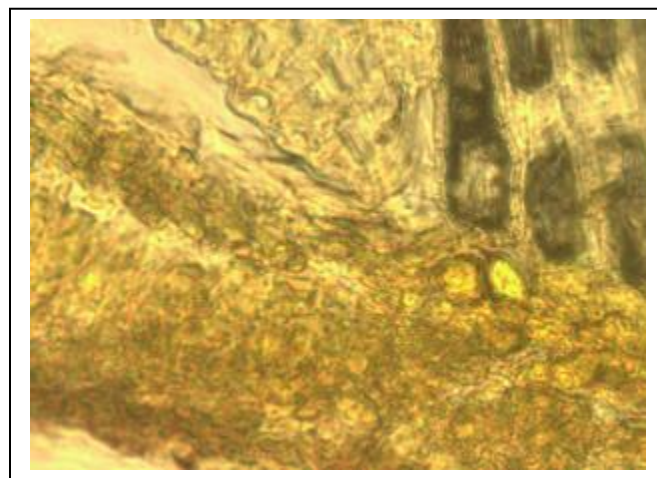


MICROSCOPY

(1)

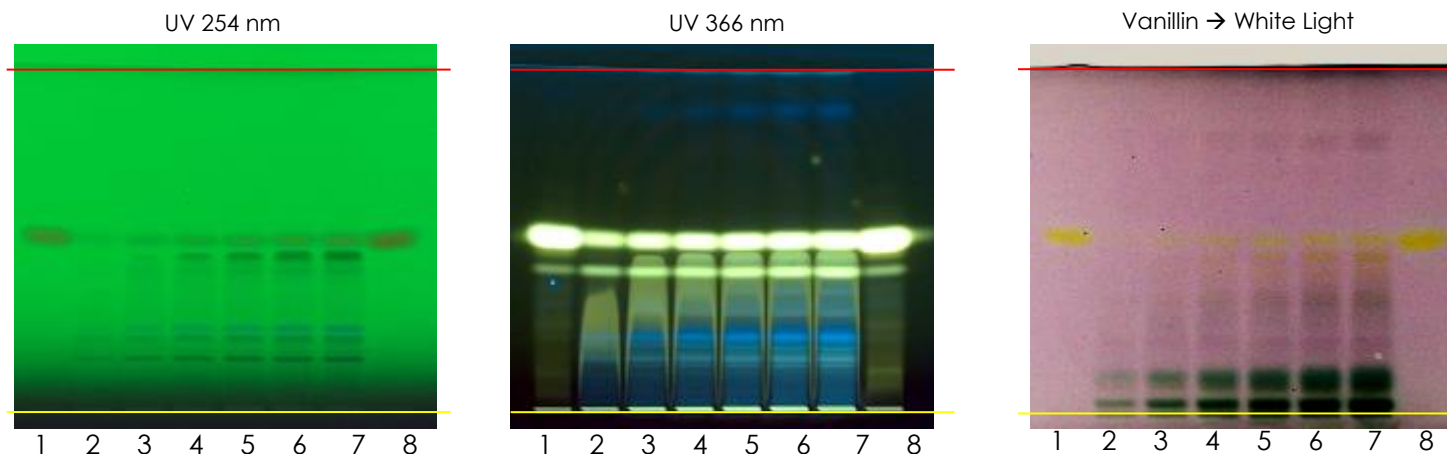


(2)



HP-TLC CONDITIONS

STATIONARY PHASE	Silica gel 60, F ₂₅₄ , 10 x 10 cm HP-TLC plates
SAMPLE PREPARATION	0.5 g + 5 mL methanol, sonicated in hot water bath for ~10 minutes, and filtered through a 0.45 µm PTFE syringe filter.
MOBILE PHASE	Ethyl acetate/ formic acid/ acetic acid/ Milli-Q water [10/1.1/1.1/2.6]
CHAMBER TEMPERATURE	Ambient
DETECTION	(1) UV 254 nm (2) UV 366 nm (3) Vanillin → White Light

HP-TLC PLATES


YELLOW LINE = SAMPLE ORIGIN
 RED LINE = SOLVENT FRONT @ 70 mm

HP-TLC LANE APPLICATIONS

Lane	ID	Lane	ID
1	Berberine	5	<i>Mahonia aquifolium</i> (VBRM)
2	<i>Mahonia aquifolium</i> (VBRM)	6	<i>Mahonia aquifolium</i> (VBRM)
3	<i>Mahonia aquifolium</i> (VBRM)	7	<i>Mahonia aquifolium</i> (VBRM)
4	<i>Mahonia aquifolium</i> (VBRM)	8	Berberine

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	03/05/2019	New report

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