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Certificate of Analysis

PRODUCT Actaea racemosa (Black Cohosh) Root

PART NUMBER 00030771

Biomass Reference Material (VBRM) * **REFERENCE TYPE**

LOT NUMBER 00030771-556

COMMON NAME Black Cohosh

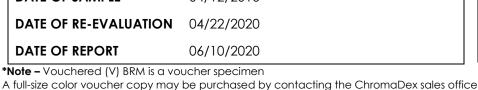
LATIN NAME Actaea racemosa L. [Ranunculaceae]

PLANT PART

CDXA NUMBER CDXA-16-000592

REPORT NUMBER CDXA-VBRMR-185-01

DATE OF SAMPLE 04/12/2016



ANALYTICAL RESULTS

TEST	METHOD	RESULT
Appearance	Macroscopy	(1) Whole/Cut: Long, thin brown roots
Appearance	Масгозсору	Milled: Grey/cream powder
Anatomy/Morphology	Microscopy	(1) Root endodermis (20x)
Anatomy/Morphology		(2) Elongated cortical root parenchyma (40x)
HP-TLC	CDXA-TLCM-102-01	Conforms

STORAGE CONDITIONS

STORAGE 20-30 °C; Dry storage area; Insect free; Volatile free

EXPIRATION DATE 04/2025 under the above conditions

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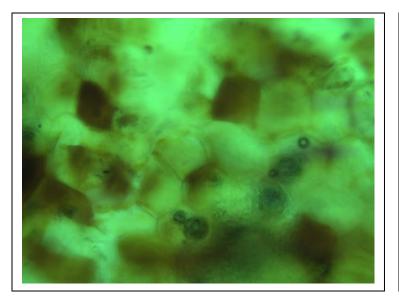
MACROSCOPY

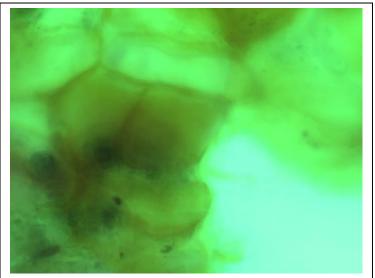
(1)



MICROSCOPY

(1)





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HP-TLC CONDITIONS

STATIONARY PHASE Silica gel 60, F₂₅₄, 10 x 10 cm HP-TLC plates

SAMPLE PREPARATION ~0.5 g + 5 mL methanol, sonicated in hot water bath for ~10 minutes.

MOBILE PHASE Tolune/ ethyl formate/ formic acid

[5/3/2]

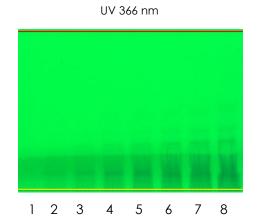
CHAMBER TEMPERATURE Ambient

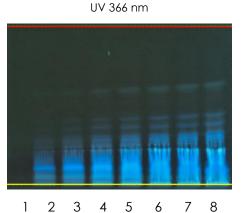
DETECTION (1) UV 254 nm

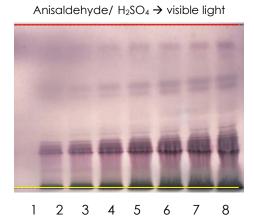
(2) UV 366 nm

(3) Anisaldehyde/H₂SO₄ reagent→ visible light

HP-TLC PLATES







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

HP-TLC LANE APPLICATIONS

Lane	ID		Lane	ID
1	MeOH blank 2.0 µL	MeOH blank 2.0 µL		Actaea racemosa 6.0 µL
2	Actaea racemosa 1.0 µL		6	Actaea racemosa 8.0 µL
3	Actaea racemosa 2.0 µL		7	Actaea racemosa 10.0 µL
4	Actaea racemosa 4.0 µL		8	Actaea racemosa 12.0 µL

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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	04/14/2016	New report
01	06/10/2020	Passed re-evaluation by HPTLC. Updated expiration date; method conditions, lane applications, and HPTLC images.

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