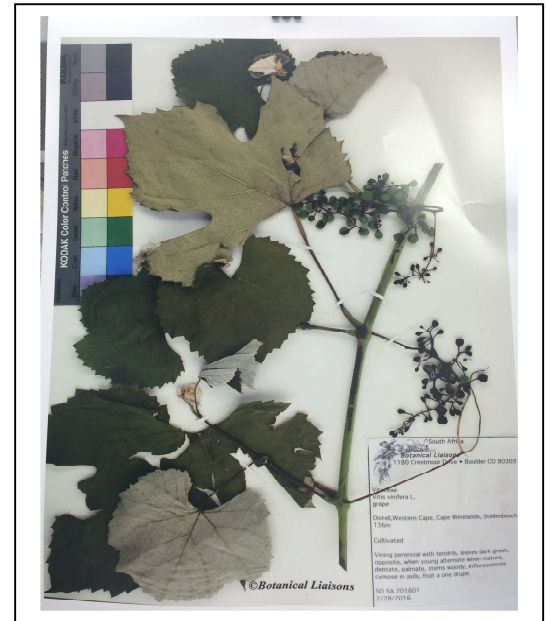


CERTIFICATE OF ANALYSIS

For Laboratory Use Only

PRODUCT	Grape (<i>Vitis vinifera</i>) Seed
PART NUMBER	00036131
REFERENCE TYPE	Biomass Reference Material (VBRM) *
LOT NUMBER	00036131-567
COMMON NAME	Grape
LATIN NAME	<i>Vitis vinifera</i> L. [Vitaceae]
PLANT PART	Seed
CDXA NUMBER	CDXA-16-008791
REPORT NUMBER	CDXA-VBRMR-189-00
DATE OF SAMPLE	07 July 2016
DATE OF REPORT	20 July 2016



*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: Small purple seeds (2) Milled: Dark purple/red powder
Anatomy/Morphology	Microscopy	(1) Oil droplets of the seed and testa, transverse view (100x) (2) Macrosclereids of the seed testa, longitudinal view (200x)
HP-TLC	CDXA-TLCM-125-02	Conforms

STORAGE CONDITIONS

STORAGE 20-30 °C; Dry storage area; Insect free; Volatile free
EXPIRATION DATE 07/2031 under the above conditions

CERTIFICATE OF ANALYSIS

For Laboratory Use Only

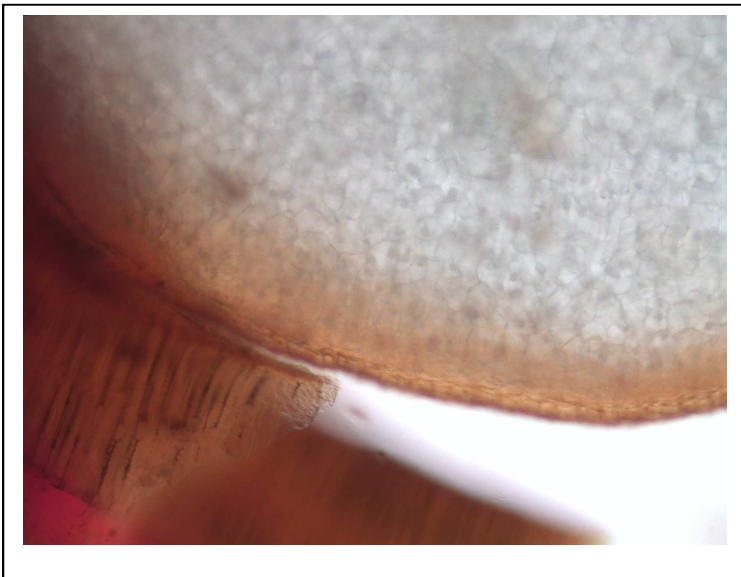
MACROSCOPY

(1)

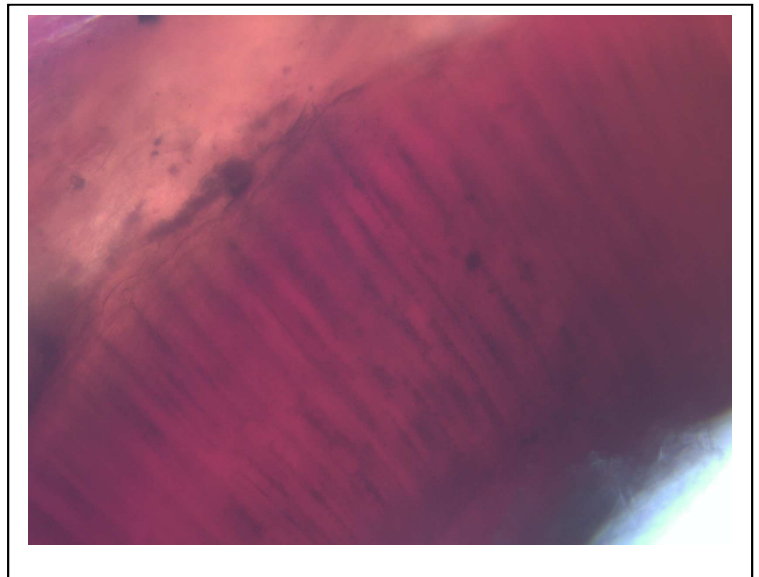


MICROSCOPY

(1)



(2)



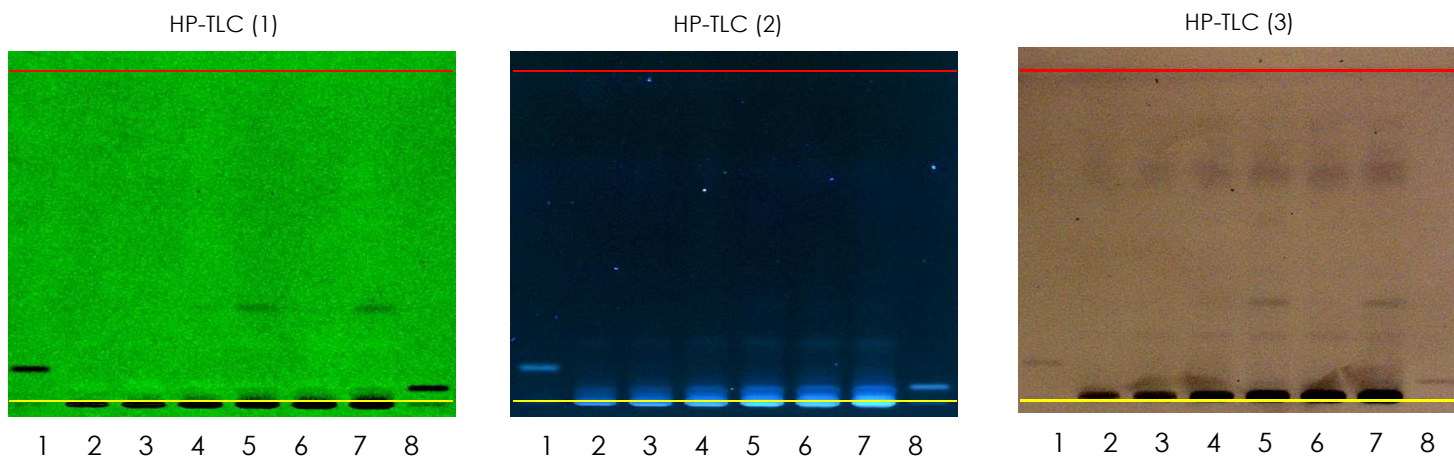
CERTIFICATE OF ANALYSIS

For Laboratory Use Only

HP-TLC CONDITIONS

STATIONARY PHASE	Silica gel 60, F ₂₅₄ , 10 x 10 cm HP-TLC plates
SAMPLE PREPARATION	0.5 g + 5 ml 70% EtOH/H ₂ O, sonicated in hot water bath for ~10 minutes.
MOBILE PHASE	Chloroform/Ethyl formate/Formic acid [6/3/1]
CHAMBER TEMPERATURE	Ambient
DETECTION	(1) UV 254 nm (2) UV 366 nm (3) Vanillin/H ₂ SO ₄ spray reagent → visible light

HP-TLC PLATES



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

HP-TLC LANE APPLICATIONS

Lane	ID	Lane	ID
1	Catechin	5	<i>Vitis vinifera</i> VBRM
2	<i>Vitis vinifera</i> VBRM	6	<i>Vitis vinifera</i> VBRM
3	<i>Vitis vinifera</i> VBRM	7	<i>Vitis vinifera</i> VBRM
4	<i>Vitis vinifera</i> VBRM	8	Epicatechin gallate



analytics



consulting



ingredients



standards

CERTIFICATE OF ANALYSIS*For Laboratory Use Only***REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	07/20/2016	New report