

Certificate of Analysis

FOR LABORATORY USE ONLY

PRODUCT	Blueberry (<i>Vaccinium corymbosum</i>) Fruit
PART NUMBER	00031121
REFERENCE TYPE	Biomass Reference Material (VBRM) *
LOT NUMBER	00031121-348
COMMON NAME	Blueberry
LATIN NAME	<i>Vaccinium corymbosum</i> L. [Ericaceae]
PLANT PART	Fruit
CDXA NUMBER	CDXA-09-3280
REPORT NUMBER	CDXA-VBRMR-093-01
DATE OF SAMPLE	24 July 2009
DATE OF RE-EVALUATION	07 April 2014
DATE OF REPORT	15 April 2014



*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: Whole dehydrated blueberries (2) Milled: Dark purple powder
Anatomy/Morphology	Microscopy	(1) Clusters of 2-4 elongated thick-walled sclereids (2) Fragment of testa showing heavily-thickened and pitted sclereids
HP-TLC	CDXA-TLCM-281-00	Conforms

STORAGE CONDITIONS

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

EXPIRATION DATE 04/2029 under the above conditions



MACROSCOPY

(1)



MICROSCOPY

(1)



(2)

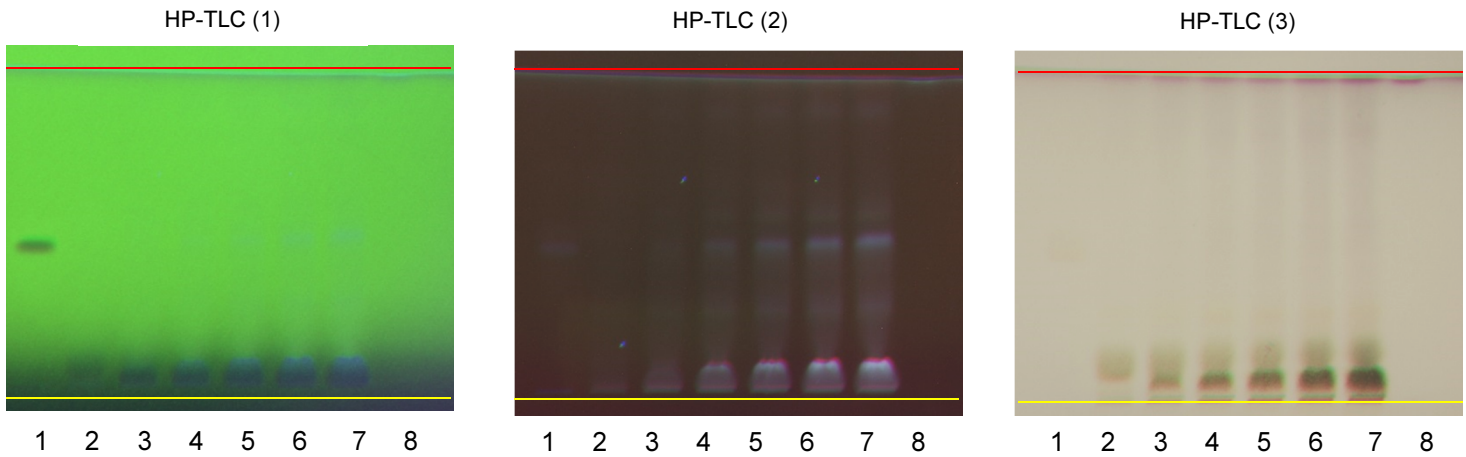




HP-TLC CONDITIONS

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.
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 365 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	Asorbic acid	5	<i>Vaccinium corymbosum</i> VBRM
2	<i>Vaccinium corymbosum</i> VBRM	6	<i>Vaccinium corymbosum</i> VBRM
3	<i>Vaccinium corymbosum</i> VBRM	7	<i>Vaccinium corymbosum</i> VBRM
4	<i>Vaccinium corymbosum</i> VBRM	8	β-sitosterol

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	22 October 2009	New report
01	15 April 2014	Passed re-evaluation; updated expiration date; updated HP-TLC plate pictures; general template update