

PRODUCT	<i>Zingiber officinale</i> (Ginger) Root
PART NUMBER	00030956
REFERENCE TYPE	Biomass Reference Material (VBRM) *
LOT NUMBER	00030956-222
COMMON NAME	Ginger
LATIN NAME	<i>Zingiber officinale</i> Roscoe [Zingiberaceae]
PLANT PART	Root
SAMPLE NUMBER	CDXP-22-00849
REPORT NUMBER	CDXA-VBRM-214-00
DATE OF SAMPLE	09/13/2022
DATE OF REPORT	10/14/2022



*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: The rhizome is laterally compressed, bearing short, flattened, obovate oblique branches on the upper side, each sometimes having a depressed scar at the apex. The external surface shows longitudinal striations with occasional loose fibres. The fracture is short and starchy with projecting fibres. The smoothed transversely cut surface exhibits a narrow cortex separated by an endodermis from a much wider stele; it shows numerous, scattered, fibrovascular bundles and abundant scattered oleoresin cells with yellow contents. (2) Milled: Clumpy brown powder
Anatomy/Morphology	Microscopy (400x, acidified chloral hydrate glycerol solution)	(1) Large, thin-walled, septate fibres, with one wall frequently dentate (2) Black materials
HP-TLC	See HP-TLC conditions	Conforms

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution, or disclosure by or to others is strictly prohibited.

STORAGE CONDITIONS

STORAGE 20-30 °C; Dry storage area; Insect free; Volatile free
EXPIRATION DATE 09/2027 under the above conditions

MACROSCOPY

(1)



(2)

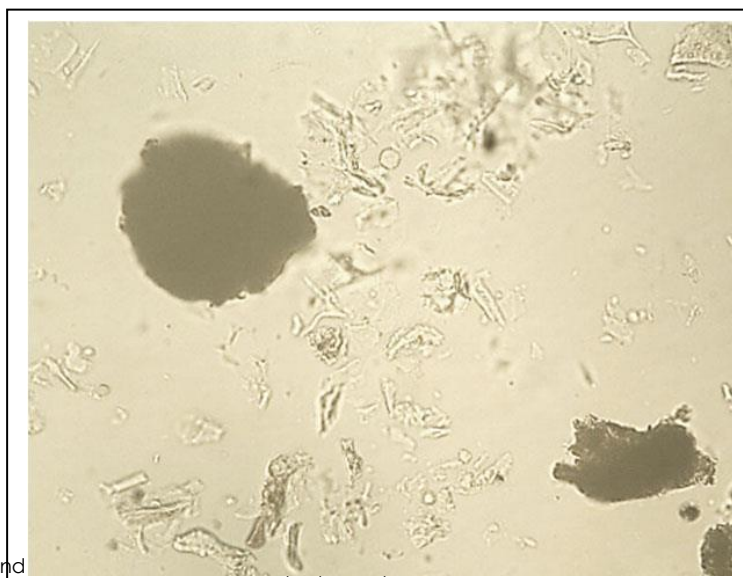


MICROSCOPY

(1)



(2)



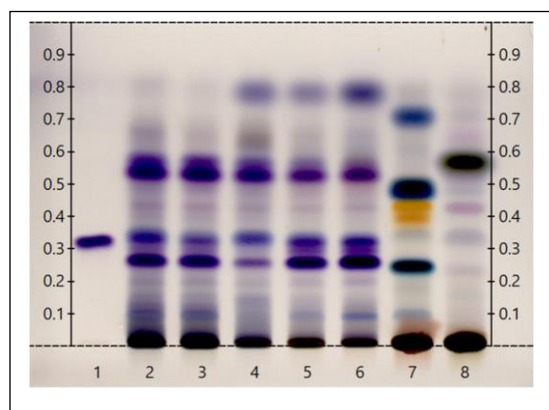
This document is the property of ChromaDex and Life Technologies. It is intended for the use of the intended recipient(s). Any review, use, distribution, or disclosure by or to others is strictly prohibited.

HP-TLC CONDITIONS

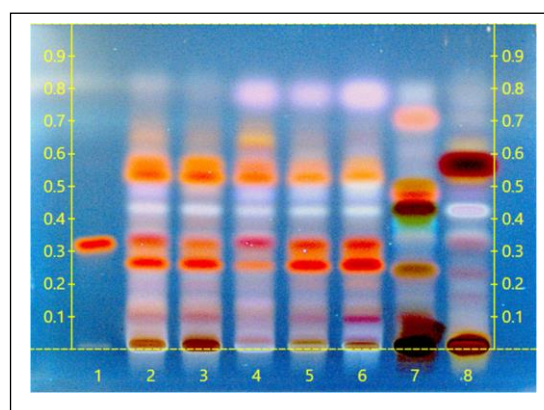
STATIONARY PHASE	Silica gel 60, HPTLC plates
SAMPLE PREPARATION	0.3 g + 3 mL 70% grain Ethanol, sonicate/heat at 50 °C for 30 min.
MOBILE PHASE	Toluene/ ethyl acetate [7.5/2.5]
DETECTION	(1) Vanillin/Sulfuric, 110 °C, 2 min, visible light (2) Vanillin/Sulfuric, 110 °C, 2 min, 366 nm

HP-TLC PLATES

HP-TLC (1)



HP-TLC (2)



HP-TLC LANE APPLICATIONS

Lane	ID	Lane	ID
1	10-Gingerol, Methanol (2 µL)	5	NA
2	<i>Zingiber officinale</i> (rhizome) (6 µL)	6	<i>Zingiber officinale</i> VBRM (2 µL)
3	<i>Zingiber officinale</i> (root) (6 µL)	7	<i>Alpinia Officinarum</i> (rhizome) (6 µL)
4	NA	8	<i>Alpinia galanga</i> (rhizome) (6 µL)

REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	10/14/2022	New report

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution, or disclosure by or to others is strictly prohibited.