

CERTIFICATE of ANALYSIS



Cayman LipiDOT Strips™ - PIPs Plus

For R&D purposes only. Not intended for human or animal use.

Item No.:	38924
Batch No.:	0699912
Expiry Date:	08FEB2025 (valid from date of certification)
Contents:	Each package contains two LipiDOT Strips. Each LipiDOT Strip is a nitrocellulose strip containing 24 defined dots: 22 spots where individual lipids have been deposited and two blank spots. The single component lipids include phosphoinositide phosphates (PIPs) and other lipids common in cells.
Storage & Handling:	Temperature sensitive. Product should be stored as supplied at 2-8°C.

Quality Test Methods

Quality tests are performed on a subset of strips from each batch to confirm proper manufacture and functionality of the strips. Depending on the specific lipids, two different tests are performed for this product.

Functional Assay

A protein-binding assay using PtdIns-(4,5)-P₂ (PI(4,5)-P₂) Binding Protein (GST-tagged) (Item No. 10009815) is performed and visualized using Western blot. In addition to interacting with PI(4,5)-P₂, this protein also binds non-specifically to other PIPs. All PIPs must produce a visible spot for a passing result.

LC-MS/MS Assay

The presence of all lipids other than PIPs is confirmed after extraction from their dots and LC-MS/MS analysis of the expected *m/z* values for both the precursor molecular ion and one structurally informative product fragment ion. Ionization mode and identified ions for each lipid are not included but can be provided upon request. A signal above background must be produced for a passing result.

Approval:

Title: Manager, Analytical Chemistry

Certification Date: 08FEB2024

Cayman Chemical certifies that this product meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiry date when stored unopened as recommended.

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Results

Spot ID	Method	Lipid	Observation	Result
L1	LC-MS/MS Assay	PI(16:0/16:0)	Precursor/product signal detected	Pass
L2	Functional Assay	PI(3)P	Spot detected	Pass
L3	Functional Assay	PI(4)P	Spot detected	Pass
L4	Functional Assay	PI(5)P	Spot detected	Pass
L5	Functional Assay	PI(3,4)P ₂	Spot detected	Pass
L6	Functional Assay	PI(3,5)P ₂	Spot detected	Pass
L7	Functional Assay	PI(4,5)P ₂	Spot detected	Pass
L8	Functional Assay	PI(3,4,5)P ₃	Spot detected	Pass
M1	LC-MS/MS Assay	PA(16:0/16:0)	Precursor/product signal detected	Pass
M2	LC-MS/MS Assay	PS(16:0/16:0)	Precursor/product signal detected	Pass
M3	LC-MS/MS Assay	PE(16:0/16:0)	Precursor/product signal detected	Pass
M4	LC-MS/MS Assay	PC(16:0/16:0)	Precursor/product signal detected	Pass
M5	LC-MS/MS Assay	PG(16:0/16:0)	Precursor/product signal detected	Pass
M6	LC-MS/MS Assay	LPA(16:0/0:0)	Precursor/product signal detected	Pass
M7	LC-MS/MS Assay	LPC(16:0/0:0)	Precursor/product signal detected	Pass
M8	LC-MS/MS Assay	LPE(16:0/0:0)	Precursor/product signal detected	Pass
R1	LC-MS/MS Assay	CL(16:0/16:0/16:0/16:0)	Precursor/product signal detected	Pass
R2	LC-MS/MS Assay	S1P	Precursor/product signal detected	Pass
R3	LC-MS/MS Assay	SHexCer(d18:1/16:0)	Precursor/product signal detected	Pass
R4	LC-MS/MS Assay	SM(d18:1/16:0)	Precursor/product signal detected	Pass
R5	LC-MS/MS Assay	Cholesterol	Precursor/product signal detected	Pass
R6	LC-MS/MS Assay	DG(16:0/16:0)	Precursor/product signal detected	Pass

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Revision History

Revision No.	Date	Reason for Revision
01	08FEB2024	Initial version

Disclaimers

Material Safety Data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some but not all of the information required for the safe and proper use of this material. Before use, review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

Warranty and Limitation of Remedy

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specification.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver of Buyer of all claims hereunder with respect to said material. For further details, please refer to our Warranty and Limitations of Remedy located on our website and in our catalog.

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