

# PRODUCT INFORMATION



## Cayman LipiDOT Strips™ - Sphingolipids

Item No. 45290

**Storage:** 2-8°C  
**Stability:** ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

Cayman LipiDOT Strips™ - Sphingolipids is a nitrocellulose membrane-based screening tool for the identification of protein-lipid interactions and assessment of a protein's relative lipid-binding specificity and affinity. It contains 22 biologically relevant sphingolipids, including sphingosine-1-phosphate, ceramides, sphingomyelins, and a variety of glycosphingolipids, as well as two blank (blue) spots for adding positive control protein or additional lipids to the protein-lipid overlay assay. The lipids are spotted on a 3 cm x 6 cm supported nitrocellulose membrane in a 3 x 8 grid. This product can be used with Cayman's LipiDOT Strips™ Developing Chamber (Item No. 39380) for blocking, incubating, and washing.

### Protocol

Reagents needed for detecting protein-lipid interaction:

| Reagent                                                               | Description                                                                     |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Wash Buffer                                                           | PBS, pH 7.2                                                                     |
| Blocking Buffer                                                       | 1-5% non-fat dry milk in PBS, pH 7.2                                            |
| Positive control antibody options from Cayman; use antibody of choice | Ganglioside G <sub>D1a</sub> Monoclonal Antibody (Clone MOG35) (Item No. 38295) |
|                                                                       | Ganglioside G <sub>D1b</sub> Monoclonal Antibody (Clone MOG1) (Item No. 38293)  |
|                                                                       | Ganglioside G <sub>M1</sub> Monoclonal Antibody (Clone DG2) (Item No. 38290)    |
| Secondary antibody option from Cayman; use antibody of choice         | Goat Anti-Mouse IgG HRP (Item No. 10004302)                                     |

All steps should be carried out on an orbital shaker at approximately 60 RPM.

1. Remove the membrane from the protective paper using forceps and place in an appropriately sized tray.
2. Wash the blot with wash buffer for 5 minutes.
3. Block the membrane with blocking buffer for 1 hour at room temperature.
4. Wash twice with wash buffer for 5 minutes each.
5. Dilute the antibody or protein of interest in blocking buffer and incubate on the blot for 1 hour at room temperature (or 4°C if the protein is temperature sensitive).
6. Wash four times with wash buffer for 5 minutes each.
7. Employ antibody or protein detection method of choice (e.g. species-appropriate secondary antibody or anti-protein tag antibody) and dilute in blocking buffer according to the manufacturer's instructions. Incubate on the blot for 1 hour at room temperature.
8. Wash four times with wash buffer for 5 minutes each.
9. Apply an enhanced chemiluminescent (ECL) substrate for chemiluminescent imaging or use a detection method of choice.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

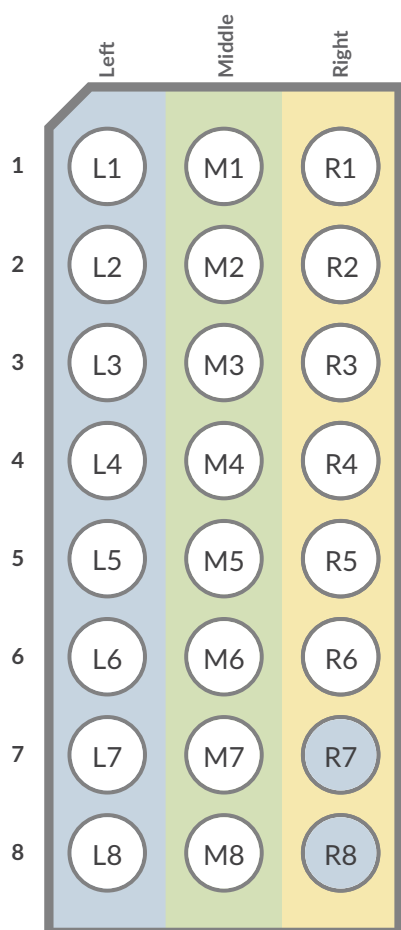
**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/01/2026

**CAYMAN CHEMICAL**  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

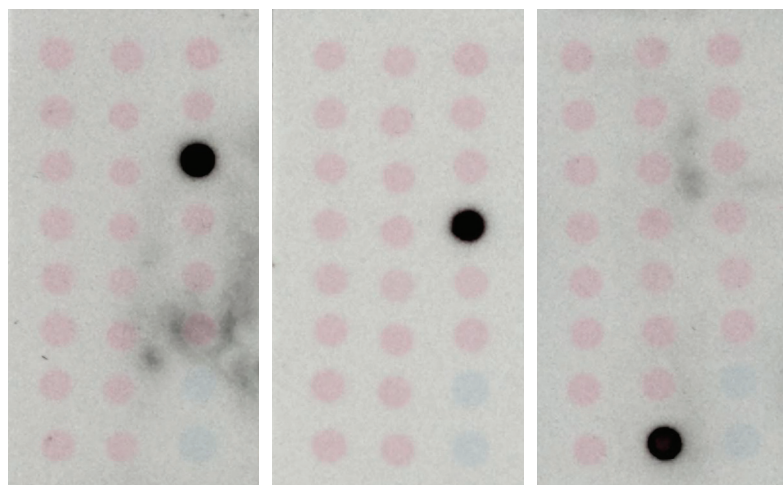
# PRODUCT INFORMATION



**G<sub>D1a</sub> Antibody**  
(Item No. 38295)

**G<sub>D1b</sub> Antibody**  
(Item No. 38293)

**G<sub>M1</sub> Antibody**  
(Item No. 38290)



Cayman LipiDot Strips™ - Sphingolipids (Item No. 45290) were blocked with non-fat dry milk and probed with the indicated antibodies at 1 µg/ml followed by a Goat Anti-Mouse IgG HRP secondary antibody (Item No. 10004302).

| Dot ID | Item Number | Sphingolipid Item Name                                             |
|--------|-------------|--------------------------------------------------------------------|
| L1     | 62570       | Sphingosine-1-phosphate (d18:1)                                    |
| L2     | 31559       | Sphingomyelin (bovine buttermilk)                                  |
| L3     | 22853       | Ceramides Mixture (bovine)                                         |
| L4     | 23210       | C22 Glucosylceramide (d18:1/22:0)                                  |
| L5     | 32600       | C16 Galactosylceramide (d18:1/16:0)                                |
| L6     | 11208       | KRN 7000                                                           |
| L7     | 24323       | Sulfatide (bovine) (sodium salt)                                   |
| L8     | 27197       | Lactosylceramide (bovine buttermilk)                               |
| M1     | 24870       | Globotriaosylceramide (porcine RBC)                                |
| M2     | 24881       | Globotetraosylceramide (porcine RBC)                               |
| M3     | 24851       | Ganglioside G <sub>M4</sub> (chicken egg) (ammonium salt)          |
| M4     | 31711       | Ganglioside G <sub>M3</sub> (bovine buttermilk) (ammonium salt)    |
| M5     | 33263       | N-glycolyl-Ganglioside G <sub>M3</sub> (ammonium salt)             |
| M6     | 31710       | Ganglioside G <sub>M2</sub> Mixture (bovine brain) (ammonium salt) |
| M7     | 15586       | Asialo Ganglioside G <sub>M1</sub>                                 |
| M8     | 31548       | Ganglioside G <sub>M1</sub> (bovine) (ammonium salt)               |
| R1     | 31709       | Ganglioside G <sub>D3</sub> (bovine buttermilk) (ammonium salt)    |
| R2     | 35774       | Ganglioside G <sub>D2</sub> (bovine buttermilk) (ammonium salt)    |
| R3     | 31591       | Ganglioside G <sub>D1a</sub> (bovine) (ammonium salt)              |
| R4     | 31708       | Ganglioside G <sub>D1b</sub> (bovine) (ammonium salt)              |
| R5     | 31712       | Ganglioside G <sub>T1b</sub> (bovine) (ammonium salt)              |
| R6     | 31561       | Ganglioside G <sub>Q1b</sub> (bovine) (ammonium salt)              |
| R7     |             | Blue Blank                                                         |
| R8     |             | Blue Blank                                                         |