# abcam

## Product datasheet

## Sphingomyelin Assay Kit ab133118

2 References 画像数 1

#### 製品の概要

製品名

検出方法

再現性

Sphingomyelin Assay Kit

Colorimetric

Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%	
plasma	16			= 3.9%	
serum	16			= 2.9%	

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%
plasma	16			= 2.5%
serum	16			= 2.4%

サンプルの種類

アッセイタイプ

検出範囲

種交差性 製品の概要 Serum, Plasma

Quantitative

5000 μg/dl - 50000 μg/dl

交差種: Mammals, Other species

Sphingomyelin Assay Kit (ab133118) provides a specific, sensitive, and convenient method for quantifying sphingomyelin in plasma or serum. In this assay, sphingomyelinase is first used to hydrolyze sphingomyelin to phosphorylcholine and ceramide. Alkaline phosphatase then generates choline from the phosphorylcholine and the newly formed choline is used to generate hydrogen peroxide in a reaction catalyzed by choline oxidase. Finally, with peroxidase as a catalyst, hydrogen peroxide reacts with DAOS and 4-aminoantipyrine to generate a blue color with an optimal absorption at OD595 nm.

Under the standardized conditions of the assay described in this booklet, the dynamic range of the kit is 5-50 mg/dL sphingomyelin.

特記事項

Sphingomyelin (ceramide phosphorylcholine) is an important lipid component of cell membranes and lipoproteins. It consists of a ceramide moiety linked via a phosphodiester bond to phosphorylcholine. Sphingomyelinases are a family of enzymes that can hydrolyze sphingomyelin

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into ceramide and phosphorylcholine. Ceramides have been implicated as key mediators in signaling pathways, with outcomes as diverse as cell proliferation, differentiation, growth arrest, and apoptosis. An inherited deficiency of acid sphingomyelinase activity results in the sphingomyelin storage disorder Niemann- Pick disease. This disease results in the accumulation of sphinogmyelin in cells, tissues, and fluids. Since sphingomyelin has been implicated in the pathogenesis of several diseases, including atherosclerosis, sensitive and reliable techniques for its quantification are of considerable importance.

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#### 試験プラットフォーム

Microplate reader

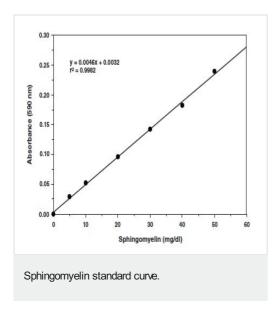
#### 製品の特性

#### 保存方法

Store at +4°C. Please refer to protocols.

内容	96 tests
96-Well Plate (Colorimetric Assay)	1 unit
96-Well Plate Cover	1 unit
SM Alkaline Phosphatase	1 vial
SM Buffer (5X)	1 vial
SM Color Detector	2 vials
SM Enzyme Mixture	2 vials
Sphingomyelin Standard	1 vial
Sphingomyelinase	1 vial

## 画像



Typical standard curve obtained with sphingomyelin provided following the protocol.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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