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Technical Data Sheet

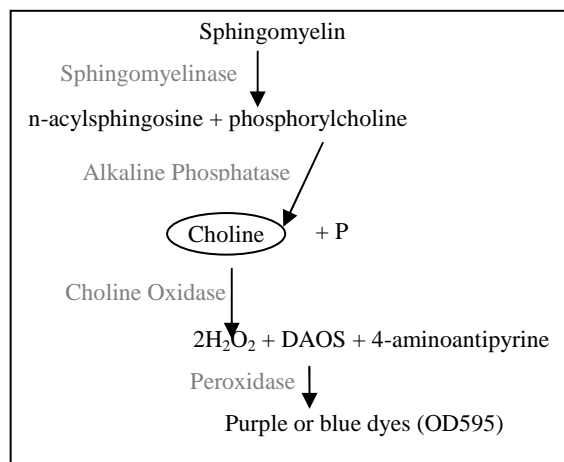
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Product Name: Sphingomyelin Assay Service

Product Number: T-31SM

Background:

The Sphingomyelin Assay Service provides a sensitive and homogenous method for the quantification of sphingomyelin. In this enzyme coupled assay sphingomyelin is cleaved into phosphorylcholine and n-acylsphingosine using Sphingomyelinase. Alkaline Phosphatase hydrolyzes phosphorylcholine and choline is oxidized by choline oxidase to hydrogen peroxide. DAOS plus 4-Aminoantipyrine (4 AAP) in the presence of hydrogen peroxide and peroxidase results in the oxidative coupling of DAOS and 4 AAP to form a blue chromogen that is measured by absorbance at 595 nm¹. Experiments have shown the Sphingomyelin Assay Service detects sphingomyelin at concentrations from 17 to 100 µg/mL.

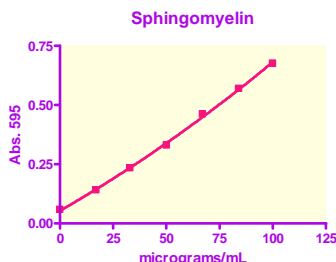


Sample Considerations:

The Sphingomyelin Assay Service has been tested for the quantification of Sphingomyelin in serum, plasma and cell culture supernatant. Freeze all samples before shipping and ship on dry ice if possible. Upon receipt all samples will be stored at -20°C. Please submit samples using the form on page 2 of this TDS. Samples cannot be stored with glycerol (the Sphingomyelinase Assay Service is not compatible with glycerol). The presence of choline in concentrations above 10 µg/mL will increase the sample background reaction. If using cell culture media with choline supplementation a background control of the cell culture media should be run. NOTE – Most classical media formulations contain choline chloride at concentrations of 1 to 5 µg/mL. PLEASE ENSURE ALL SHIPMENTS CONTAINING SAMPLES (INCLUDING HUMAN TISSUE OR FLUIDS) ARE APPROPRIATELY LABELED (BIOHAZARD – IF APPROPRIATE) AND PACKAGED TO PREVENT LEAKAGE DURING TRANSPORTATION TO ECHELON.

Assay Characteristics:

Sphingomyelin is quantified using Echelon catalog # K-31SM (see K-31SM TDS for more information).
Assay Dynamic Range: 17 to 100 µg/mL Sphingomyelin



NOTE – Samples with Sphingomyelin levels above the upper limit of quantification will be diluted accordingly.

References:

1. J Lipid Res. 2006 Mar;47(3):673-6
2. Eur J Clin Chem Clin Biochem. 1996 Jan;34(1):9-15
3. Clin Chem. 1983;29(5):806-809

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T-31SM Sphingomyelin Assay Service – Please submit the following information with samples:

Customer Name: _____

Sample #	Identification # - enter your ID here-	Sample Type/Buffer (ie. serum, lysate)
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