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#### **Technical Data Sheet**

#### For research use only

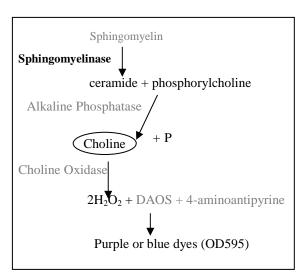
Not intended or approved for diagnostic or therapeutic use.

# **Product Name: Neutral Sphingomyelinase Assay Service**

**Product Number: T-1800** 

#### **Background:**

The Sphingomyelinase Assay Service provides a sensitive and homogenous method to measure the activity of sphingomyelinase *in vitro*. In this enzyme coupled assay sphingomyelinase catalyzes the hydrolysis of sphingomyelin into phosphorylcholine and ceramide. Alkaline phosphatase catalyzes the hydrolysis of phosphorylcholine and the oxidation of choline to hydrogen peroxide is catalyzed by choline oxidase. 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 detected by measuring the absorbance of light at 595 nm. Experiments have shown the Sphingomyelinase Assay Service measures the activity of Sphingomyelinase at concentrations as small as 78 μU/mL.

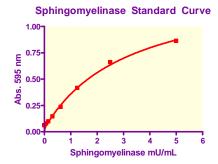


#### **Sample Considerations:**

The Sphingomyelinase Assay Service has been tested for the quantification of Sphingomyelinase 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  $\mu$ g/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  $\mu$ g/mL. PLEASE ENSURE ALL SHIPMENTS CONTAINING SAMPLES (INCLUDING HUMAN TISSUE OR FLUIDS) ARE APPROPRIATLY LABELED (BIOHAZARD – IF APPROPRIATE) AND PACKAGED TO PREVENT LEAKAGE DURING TRANSPORTATION TO ECHELON.

### **Assay Characteristics:**

Sphingomyelinase is quantified using Echelon catalog # K-1800 (see K-1800 TDS for more information). Assay Dynamic Range: 0.08 to 5 mU/mL Sphingomyelinase



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

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TDS T-1800 Rev: 1 (06/26/08)

## T-1800 Sphingomyelinase Assay Service – Please submit the following information with samples:

Customer Name:

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