

# Active Acid Sphingomyelinase (ASM) Instruction Manual

## SBPB225Mu61

**Mus musculus (Mouse)**

**Buffer Formulation**

PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

**Traits**

Freeze-dried powder

**Purity**

> 97%

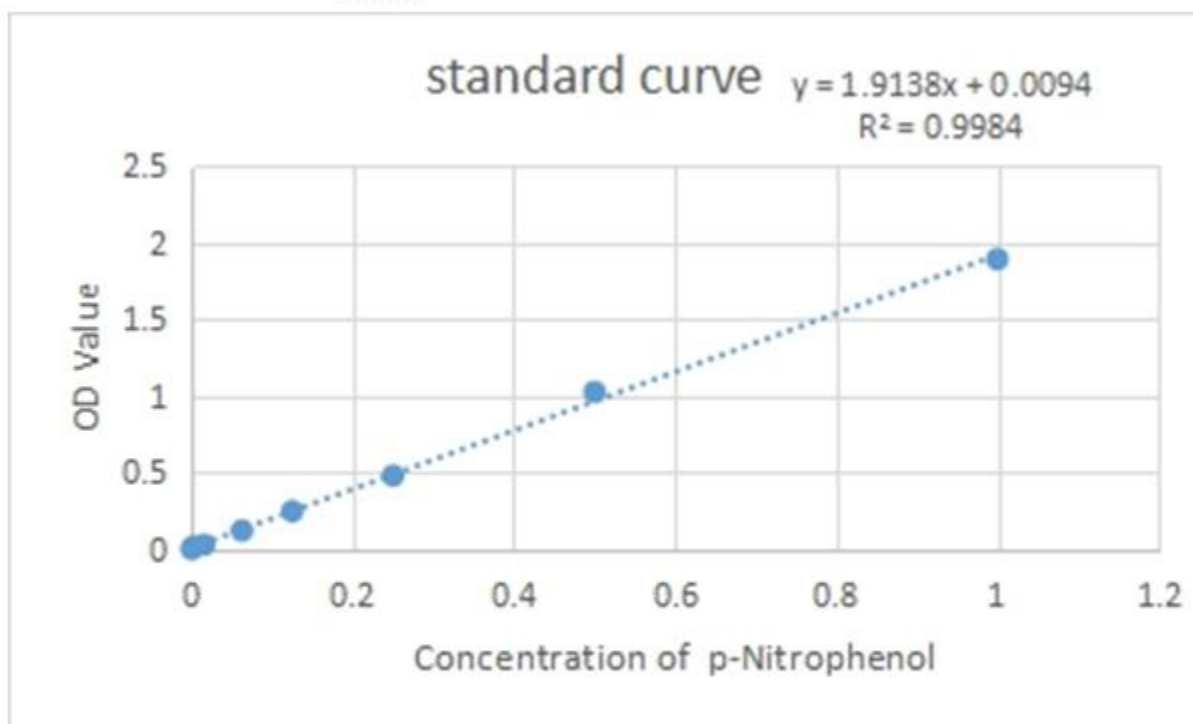
**Isoelectric Point**

6.9

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST



**Figure 1. The standard curve of p-Nitrophenol**

Sphingomyelin phosphodiesterase 1 (SMPD1), also known as acid sphingomyelinase (ASM), belongs to the sphingomyelin phosphodiesterase family. The protein Converts

sphingomyelin to ceramide. ASM also has phospholipase C activities toward 1,2-diacylglycerolphosphocholine and 1,2-diacylglycerolphosphoglycerol.

Thus, the recombinant mouse ASM activity was measured by its ability to hydrolyze 2-N-Hexadecanoylamino-4-nitrophenylphosphorylcholine (HDA-PC) to p-Nitrophenol. The reaction was performed in 50mM MES, 0.5  $\mu$ M ZnCl<sub>2</sub>, pH 7.5 ( Assay Buffer), initiated by addition 50 $\mu$ L of various concentrations of ASM (diluted with Assay Buffer) to 50  $\mu$ L of 1mM Substrate HDA-PC ( 50mM stock solution in methanol, diluted with Assay Buffer). Incubated at room temperature for 20 minutes in the dark, then read at a wavelength of 405 nm.

## **USAGE**

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **STORAGE**

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

## **STABILITY**

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## **Image**

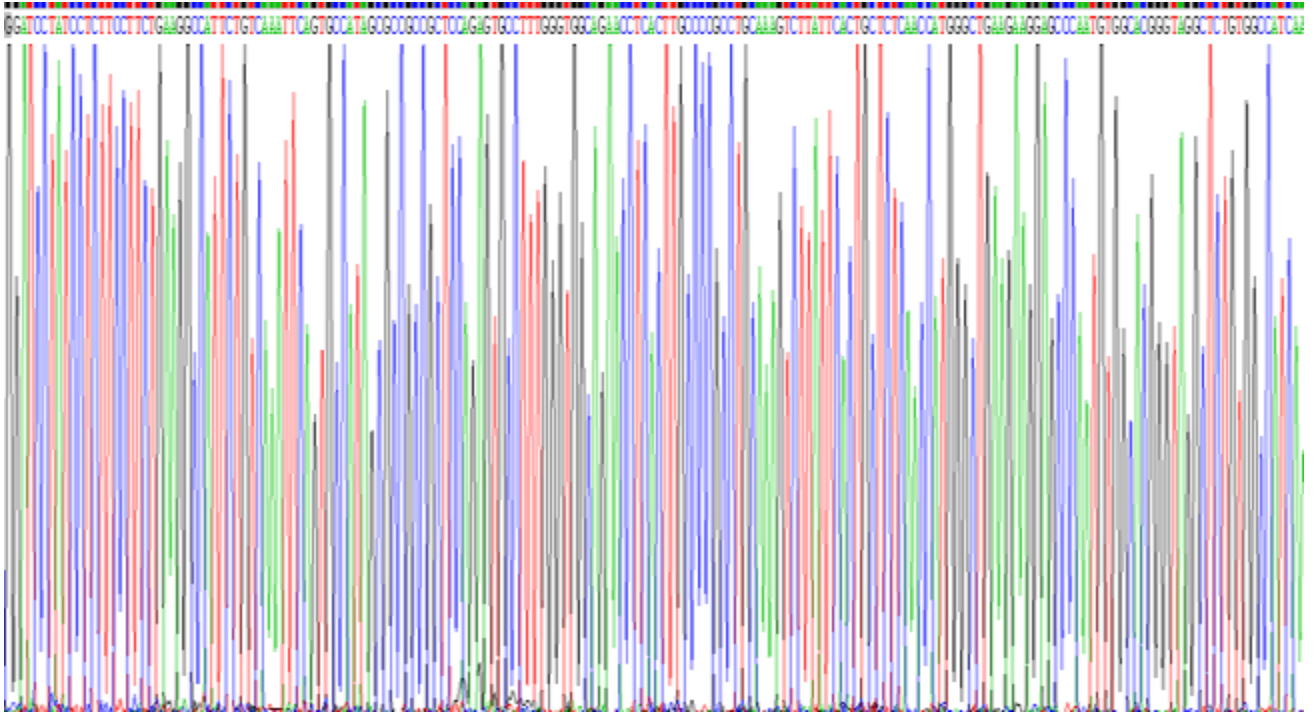


Figure. SDS-PAGE

**[IMPORTANT NOTE]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.