

## ARG82482 Human SMPD1 / Acid Sphingomyelinase ELISA Kit

Package: 96 wells  
Store at: 4°C

### Component

Cat. No.	Component Name	Package	Temp
ARG82482-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82482-002	Standard	2 X 10 ng/vial	4°C
ARG82482-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82482-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82482-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82482-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82482-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82482-008	25X Wash buffer	20 ml	4°C
ARG82482-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82482-010	STOP solution	10 ml (Ready to use)	4°C
ARG82482-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG82482 Human SMPD1 / Acid Sphingomyelinase ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human SMPD1 / Acid Sphingomyelinase in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	SMPD1 / Acid Sphingomyelinase
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	10 pg/ml
Sample Type	Serum, plasma (heparin) and cell culture supernatants.
Standard Range	15.6 - 1000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.7%

Inter-Assay CV: 6.5%

#### Alternate Names

aSMase; EC 3.1.4.12; NPD; ASMASE; Sphingomyelin phosphodiesterase; Acid sphingomyelinase; ASM

## Application Instructions

#### Assay Time

~ 5 hours

## Properties

#### Form

96 well

#### Storage instruction

Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

#### Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

#### Gene Symbol

SMPD1

#### Gene Full Name

sphingomyelin phosphodiesterase 1, acid lysosomal

#### Background

The protein encoded by this gene is a lysosomal acid sphingomyelinase that converts sphingomyelin to ceramide. The encoded protein also has phospholipase C activity. Defects in this gene are a cause of Niemann-Pick disease type A (NPA) and Niemann-Pick disease type B (NPB). Multiple transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2010]

#### Function

Converts sphingomyelin to ceramide. Also has phospholipase C activities toward 1,2-diacylglycerolphosphocholine and 1,2-diacylglycerolphosphoglycerol. Isoform 2 and isoform 3 have lost catalytic activity. [UniProt]

#### Highlight

Related products:

[SMPD1 / Acid Sphingomyelinase antibodies](#); [SMPD1 / Acid Sphingomyelinase ELISA Kits](#);

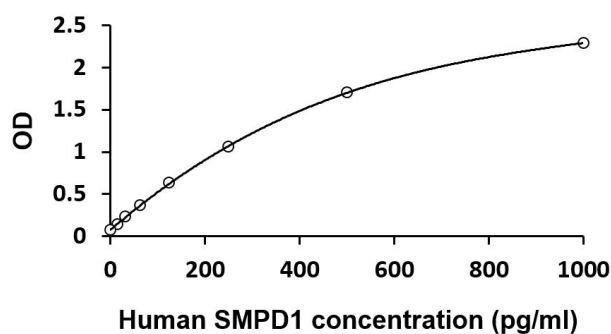
New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

#### Cellular Localization

Lysosome. Secreted. [UniProt]

## Images



ARG82482 Human SMPD1 / Acid Sphingomyelinase ELISA Kit standard curve image

ARG82482 Human SMPD1 / Acid Sphingomyelinase ELISA Kit results of a typical standard run with optical density reading at 450 nm.