



Human acid sphingomyelinase, ASM ELISA Kit

Product Code	CSB-E09361h
Abbreviation	SMPD1
Target Name	sphingomyelin phosphodiesterase 1, acid lysosomal
Uniprot No.	P17405
Alias	ASM, NPD, acid sphingomyelinase
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, cerebrospinal fluid (CSF), urine
Detection Range	1.25 ng/mL-80 ng/mL
Sensitivity	0.31 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	SMPD1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human SMPD1 ELISA Kit was designed for the quantitative measurement of Human SMPD1 protein in serum, plasma, cell culture supernates, cerebrospinal fluid (CSF), urine. It is a Sandwich ELISA kit, its detection range is 1.25 ng/mL-80 ng/mL and the sensitivity is 0.31 ng/mL.
Target Details	This protein 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). Three transcript variants encoding two different isoforms have been found for this gene.
Product Precision	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in twenty assays to assess.



Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human ASM in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

	Sample	Serum(n=4)
1:1	Average %	91
	Range %	86-95
1:2	Average %	102
	Range %	97-107
1:4	Average %	91
	Range %	85-97
1:8	Average %	97
	Range %	91-103

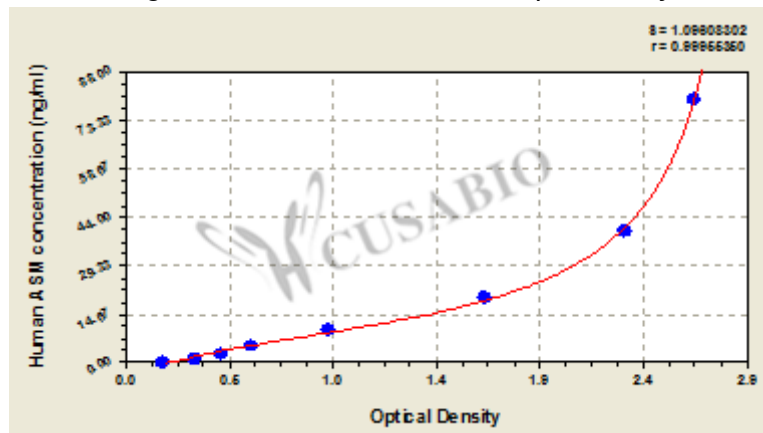
Recovery

The recovery of human ASM spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	95	89-98
EDTA plasma (n=4)	97	90-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
80	2.662	2.568	2.615	2.433
40	2.223	2.368	2.296	2.114
20	1.678	1.638	1.658	1.476
10	0.948	0.931	0.940	0.758
5	0.596	0.579	0.588	0.406
2.5	0.443	0.456	0.450	0.268
1.25	0.325	0.332	0.329	0.147
0	0.181	0.183	0.182	

Msds

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