ASM Polyclonal Antibody

Catalog No	BYab-07703
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;ELISA
Gene Name	SMPD1 ASM
Protein Name	Sphingomyelin phosphodiesterase (EC 3.1.4.12) (Acid sphingomyelinase) (aSMase)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	ASM Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	69kD
Cell Pathway	Lysosome . Lipid droplet . Secreted . The secreted form is induced in a time- and dose-dependent by IL1B and TNF as well as stress and viral infection. This increase of the secreted form seems to be due to exocytosis of the lysosomal form and is Ca(2+)-dependent (PubMed:20807762, PubMed:22573858, PubMed:20530211). Secretion is dependent of phosphorylation at Ser-510 (PubMed:17303575). Secretion is induced by inflammatory mediators such as IL1B, IFNG or TNF as well as infection with bacteria and viruses (PubMed:12563314, PubMed:20807762). .
Tissue Specificity	Brain,Fibroblast,Lung,
Function	catalytic activity:Sphingomyelin + H(2)O = N-acylsphingosine + choline phosphate.,disease:Defects in SMPD1 are the cause of Niemann-Pick disease type A (NPA) [MIM:257200]; also referred to as the classical infantile form. Niemann-Pick disease is a clinically and genetically heterogeneous recessive disorder. It is caused by the accumulation of sphingomyelin and other

	metabolically related lipids in the lysosomes, resulting in neurodegeneration starting from early life. Patients may show xanthomas, pigmentation, hepatosplenomegaly, lymphadenopathy and mental retardation. Niemann-Pick disease occurs more frequently among individuals of Ashkenazi Jewish ancestry than in the general population. NPA is characterized by very early onset in infancy and a rapidly progressive course leading to death by three years.,disease:Defects in SMPD1 are the cause of Niemann-Pick disease type B (NPB) [MIM:60
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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