Datasheet for ABIN968809

anti-ASAH1 antibody (AA 88-182)

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Overview

Quantity:	50 µg
Target:	ASAH1
Binding Specificity:	AA 88-182
Reactivity:	Human, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ASAH1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human Acid Ceramidase aa. 88-182
Clone:	23-Acid Ceramidase
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	ASAH1
Alternative Name:	Acid Ceramidase (ASAH1 Products)
Background:	Ceramide is a sphingolipid that exhibits a wide variety of functions, including monocyte differentiation, apoptosis, neurite outgrowth, and Ca2+ transport. It also serves as the precursor of many sphingolipids and anchors these into the outer leaflet of the plasma membrane via hydrophobic interactions. Acid ceramidase is a lysosomal enzyme that was purified from human urine. It is synthesized as a 55kDa precursor protein, which is then processesed into the mature alpha-subunit (13kDa) and beta-subunit (40kDa). Acid ceramidase catalyzes the hydrolysis of ceramide into free fatty acid and sphingosine. Sphingosine, and its phosphorylated form, sphingosine-1-phosphate (SPP), have been shown to inhibit PKC activity and act as a second messenger in cell proliferation and differentiation. Acid ceramidase is also the cause of a lysosomal storage disorder known as Farber's disease. This disease is characterized by an accumulation of ceramide in tissues, leading to swelling and pain of the joints and extremities, pulmonary insufficiency, and death at an early age. Thus, acid ceramidase is necessary in the hydrolysis of ceramide and is the cause of Farber's disease.
Molecular Weight:	13 kDa

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20°C.

Publications

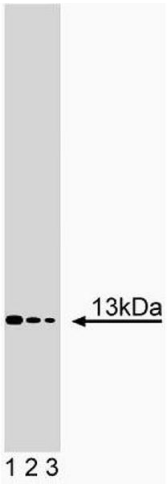
Product cited in:

Ferlinz, Kopal, Bernardo, Linke, Bar, Breiden, Neumann, Lang, Schuchman, Sandhoff: "Human acid ceramidase: processing, glycosylation, and lysosomal targeting." in: **The Journal of biological chemistry**, Vol. 276, Issue 38, pp. 35352-60, (2001) (PubMed).

Strelow, Bernardo, Adam-Klages, Linke, Sandhoff, Krönke, Adam: "Overexpression of acid ceramidase protects from tumor necrosis factor-induced cell death." in: **The Journal of experimental medicine**, Vol. 192, Issue 5, pp. 601-12, (2000) (PubMed).

Bernardo, Hurwitz, Zenk, Desnick, Ferlinz, Schuchman, Sandhoff: "Purification, characterization, and biosynthesis of human acid ceramidase." in: **The Journal of biological chemistry**, Vol. 270, Issue 19, pp. 11098-102, (1995) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of Acid Ceramidase on NHEK lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of Acid Ceramidase.