# neutral ceramidase (H-300): sc-68906



The Power to Question

#### **BACKGROUND**

neutral ceramidase, also known as ASAH2 (N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2), HNAC1, BCDase or NCDase, is a 780 amino acid single-pass type II membrane protein that exists as a precursor which is proteolytically cleaved to produce a soluble active peptide. Expressed ubiquitously with highest levels present in heart, intestine, kidney and skeletal muscle, neutral ceramidase functions to catalyze the hydrolysis of sphingolipid ceramide into sphingosine and free fatty acid, a reaction that occurs at an optimal pH of 6.5-8.5 and is essential for the regulation of sphingolipid signaling metabolites. Additionally, neutral ceramidase plays a role in apoptotic suppression, as well as in the digestion of dietary sphingolipids within intestinal tissue. Multiple isoforms of neutral ceramidase exist due to alternative splicing events.

# **CHROMOSOMAL LOCATION**

Genetic locus: ASAH2 (human) mapping to 10q11.23; Asah2 (mouse) mapping to 19 C1.

## **SOURCE**

neutral ceramidase (H-300) is a rabbit polyclonal antibody raised against amino acids 34-333 mapping within a cytoplasmic domain of neutral ceramidase of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **APPLICATIONS**

neutral ceramidase (H-300) is recommended for detection of neutral ceramidase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

neutral ceramidase (H-300) is also recommended for detection of neutral ceramidase in additional species, including porcine.

Suitable for use as control antibody for neutral ceramidase siRNA (h): sc-75908, neutral ceramidase siRNA (m): sc-75909, neutral ceramidase shRNA Plasmid (h): sc-75908-SH, neutral ceramidase shRNA Plasmid (m): sc-75909-SH, neutral ceramidase shRNA (h) Lentiviral Particles: sc-75908-V and neutral ceramidase shRNA (m) Lentiviral Particles: sc-75909-V.

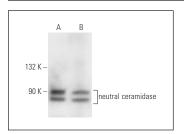
Molecular Weight of neutral ceramidase: 84 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or KNRK whole cell lysate: sc-2214.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**



neutral ceramidase (H-300): sc-68906. Western blot analysis of neutral ceramidase expression in HeLa (A) and KNRK (B) whole cell lysates.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **neutral ceramidase (B-9): sc-374634**, our highly recommended monoclonal alternative to neutral ceramidase (H-300).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com