

Rabbit Anti-ASAH2 antibody

SL6021R

| Product Name: | ASAH2 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chinese Name: | 酰基鞘氨醇脱酰酶2抗体 |
| Alias: | Acylsphingosine deacylase 2; ASAH2; ASAH2_HUMAN; BCDase; hCD; HNAC1; LCDase; MGC129777; mitochondrial ceramidase; N acylsphingosine amidohydrolase (non lysosomal ceramidase) 2; N acylsphingosine amidohydrolase 2; N CDase; N-acylsphingosine amidohydrolase 2; N-CDase; NCDase; Neutral ceramidase soluble form; Non lysosomal ceramidase; Non-lysosomal ceramidase. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, Dog, Rabbit, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 86kDa |
| Cellular localization: | The cell membraneSecretory protein |
| Form: | Lyophilized or Liquid |
| Concentration: | 1 mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human ASAH2:701-780/780 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Hydrolyzes the sphingolipid ceramide into sphingosine and free fatty acid at an optimal pH of 6.5-8.5. Acts as a key regulator of sphingolipid signaling metabolites by generating sphingosine at the cell surface. Acts as a repressor of apoptosis both by |

reducing C16-ceramide, thereby preventing ceramide-induced apoptosis, and generating sphingosine, a precursor of the antiapoptotic factor sphingosine 1-phosphate. Probably involved in the digestion of dietary sphingolipids in intestine by acting as a key enzyme for the catabolism of dietary sphingolipids and regulating the levels of bioactive sphingolipid metabolites in the intestinal tract.

Function:

Hydrolyzes the sphingolipid ceramide into sphingosine and free fatty acid at an optimal pH of 6.5-8.5. Acts as a key regulator of sphingolipid signaling metabolites by generating sphingosine at the cell surface. Acts as a repressor of apoptosis both by reducing C16-ceramide, thereby preventing ceramide-induced apoptosis, and generating sphingosine, a precursor of the antiapoptotic factor sphingosine 1-phosphate. Probably involved in the digestion of dietary sphingolipids in intestine by acting as a key enzyme for the catabolism of dietary sphingolipids and regulating the levels of bioactive sphingolipid metabolites in the intestinal tract.

Subcellular Location:

Cell membrane; Single-pass type II membrane protein. Note=The neutral ceramidase soluble form is a secreted protein. According to PubMed:10781606, it is mitochondrial. However, they used a shorter form in its N-terminus, which may explain this localization which probably does not exist in vivo.

Tissue Specificity:

Primarily expressed in the intestine (PubMed:17334805). Ubiquitously expressed with higher levels in kidney, skeletal muscle and heart (PubMed:10781606). According to PubMed:17334805, ubiquitous expression attributed to ASAH2 may be actually that of the paralog ASAH2B.

Post-translational modifications:

N-glycosylated. Required for enzyme activity (By similarity).

O-glycosylated. Required to retain it as a type II membrane protein at the cell surface. Phosphorylated. May prevent ubiquitination and subsequent degradation (By similarity).

Ubiquitinated, leading to its degradation by the proteasome. Ubiquitination is triggered by nitric oxid (By similarity).

Similarity:

Belongs to the neutral ceramidase family.

SWISS:

Q9NR71

Gene ID:

56624

Database links:

Entrez Gene: 56624Human

Entrez Gene: 653308Human

Entrez Gene: 54447 Mouse

Entrez Gene: 114104Rat

Omim: 611202Human

SwissProt: Q9NR71Human

SwissProt: Q9JHE3Mouse

SwissProt: Q91XT9Rat

Unigene: 512645Human

Unigene: 710005Human

Unigene: 104900Mouse

Unigene: 156958Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.