Human ASAHL/N-acylethanolamine-hydrolyzing Acid A Antibody

Monoclonal Mouse IgG_1 Clone # 511702

Catalog Number: MAB4494

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ASAHL/N-acylethanolamine-hydrolyzing Acid A in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant mouse ASAHL is observed and no cross-reactivity with recombinant human ASAH2 or recombinant mouse ASAH2 is observed.
Source	Monoclonal Mouse IgG_1 Clone # 511702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ASAHL/N-acylethanolamine-hydrolyzing Acid A isoform 1 Ser29-Lys359 (Val151Ile) Accession # Q02083
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human N-acylethanolamine-hydrolyzing Acid Amidase/ASAHL (Catalog # 4494-AH)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human N-acylethanolamine-hydrolyzing Acid Amidase/ASAHL (Catalog # 4494-AH), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The human NAAA gene encodes N-acylethanolamine-hydrolyzing acid amidase, also known as ASAH-like protein (ASAHL), a fatty acid amidase with maximal activity at acidic pH (1). ASAHL hydrolyzes a number of *N*-acyl ethanolamines, including *N*-myristoyl-, *N*-stearoyl, *N*-oleoyl, and *N*-arachidonoyl, but is most active against *N*-palmitoylethanolamine (2). ASAHL is a member of the cholylglycine hydrolase family of enzymes, and is structurally similar to acid ceramidase (3). ASAHL is both a lysosomal and a secreted enzyme, and like acid ceramidase, has been observed to be proteolytically processed during maturation (3). ASAHL can be distinguished from anandamide amidohydrolase by its lack of inhibition by methyl arachidonyl fluorophosphonate (2).

References:

1. Hong, S.B. *et al*. (1999) Genomics **62**:232.
2. Ueda, N. *et al*. (2001) J. Biol. Chem. **276**:35552.
3. Tsuboi, K. *et al*. (2005) J. Biol. Chem. **280**:11082.