

Product Information

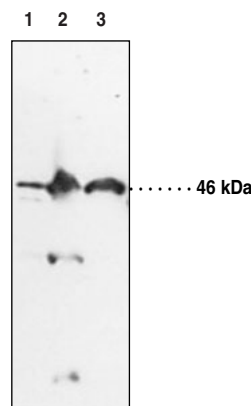


NAPE-PLD Polyclonal Antibody (aa 6-20)

Item No. 10306

- Contents:** This vial contains 300 µg affinity-purified IgG in 500 µl TBS, pH 7.4, containing 50% glycerol, 0.1% BSA, and 0.02 % sodium azide.
- Synonym:** N-Acyl-Phosphatidylethanolamine-Hydrolysing Phospholipase D
- Host:** Rabbit
- Antigen:** Human NAPE-PLD amino acids 6-20. Homology of the peptide antigen with NAPE-PLD from other species:
- | | |
|----------------------------|-------------------------------|
| Human and various primates | S N Q S L M T S S Q Y P K E A |
| Bovine | S N Q I L M T S n Q Y P K E A |
| Rat | n s Q S p a p S h Q Y P K E t |
| Mouse | d s Q S p a p S y Q Y P K E t |
- Cross Reactivity:** (+) Human, mouse, rat, and bovine NAPE-PLD; other species not tested.
- Stability:** Stable for 1 year at -20°C
- Applications:** Recommended starting dilutions: Western blotting: (1:200) 3 µg/ml; Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

N-acylethanolamines (NAEs) are involved in diverse biological processes such as inflammatory regulation, apoptosis, and tissue degeneration.¹ In animals, NAEs are mainly biosynthesized *via* a membrane phospholipid-dependent pathway, which is the enzymatic hydrolysis of N-acyl-phosphatidylethanolamine (NAPE). The enzyme catalyzing this reaction is a phospholipase D subtype selective for NAPE named N-acyl-phosphatidylethanolamine-hydrolysing phospholipase D (NAPE-PLD). It has been cloned from mouse, rat, and human and is 393-396 amino acids in length, with an estimated molecular weight of 46 kDa. Both NAPE-PLD mRNA and protein activity have been detected in a wide range of tissues with the highest levels in brain, kidney, and testis.² In rat, NAPE-PLD activity in the brain is low in neonates and is 15-fold higher in adults, whereas the activity remains constant in the heart during development.³



Lane 1: Human Cerebellum Supernatant (30 µg)
Lane 2: Mouse Brain Homogenate (50 µg)
Lane 3: Mouse Brain High-Density Membrane (30 µg)

References

- Hansen, H.S., Moesgaard, B., Petersen, G., *et al.* Putative neuroprotective actions of N-acyl-ethanolamines. *Pharmacology & Therapeutics* **95**, 119-126 (2002).
- Okamoto, Y., Morishita, J., Tsuboi, K., *et al.* Molecular characterization of a phospholipase D generating anandamide and its congeners. *J. Biol. Chem.* **279**(7), 5298-5305 (2004).
- Moesgaard, B., Petersen, G., Jaroszewski, J.W., *et al.* Age dependent accumulation of N-acyl-ethanolamine phospholipids in ischemic rat brain: A 31P NMR and enzyme activity study. *J. Lipid Res.* **41**, 985-990 (2000).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10306

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog.**

Copyright Cayman Chemical Company, 02/06/2012