



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# PRODUCT INFORMATION



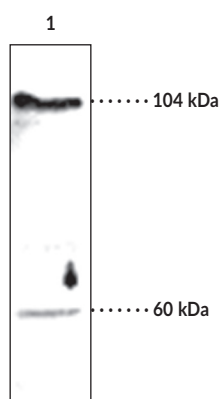
## Lysophospholipase D Polyclonal Antibody

Item No. 10005375

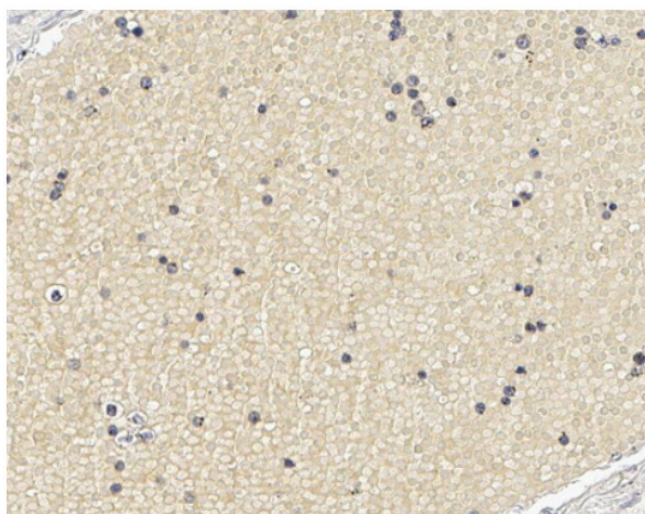
### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
<b>Synonyms:</b>	Autotaxin, ENPP2, Lyso-PLD
<b>Immunogen:</b>	Peptide from the C-terminal region of rat LysoPLD
<b>Species Reactivity:</b>	(+) Human, mouse, and rat; other species not tested
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Applications:</b>	Immunocytochemistry (ICC), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ICC is 1:500, 1:80 for IHC, and 1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: Human cerebella supernatant (40 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human cerebellum tissue after heat-induced antigen retrieval in pH 6.0 citrate buffer. After incubation with Lysophospholipase D Polyclonal Antibody (Item No. 10005375) at a 1:80 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2023

**CAYMAN CHEMICAL**  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

# PRODUCT INFORMATION



## Description

---

Lysophosphatidic acid (LPA) is an extracellular signaling lipid that evokes multiple biological functions including induction of platelet aggregation, smooth muscle contraction, and stimulation of cell proliferation and chemotaxis.<sup>1</sup> Lysophospholipase D (lysoPLD) was first discovered in 1999 as the enzyme responsible for generating LPA from lysophosphatidylcholine (LPC).<sup>2</sup> It was later revealed to be identical to an autocrine motility factor, autotaxin (ATX), which plays a role in tumor progression and metastasis.<sup>3,4</sup> LysoPLD/ATX mRNA is widely expressed with highest levels found in brain, ovary, lung, intestine, and testis.<sup>5,6</sup> Rat lysoPLD is composed of 885 amino acids with an estimated molecular weight of 101 kDa. The protein is reported to be heavily glycosylated and thus its apparent size on SDS-PAGE may be run as high as 125 kDa.<sup>7</sup> Useful positive controls include cerebrospinal fluid, mouse ascites, or seminal plasma.

## References

---

1. Ishii, I., Fukushima, N., Ye, X., *et al.* Lysophospholipid receptors: Signaling and biology. *Annu. Rev. Biochem.* **73**, 321-354 (2004).
2. Tokumura, A., Majima, E., Kariya, Y., *et al.* Identification of human lysophospholipase D, a lysophosphatidic acid-producing enzyme, as autotaxin, a multifunctional phosphodiesterase. *J. Biol. Chem.* **277(42)**, 39436-39442 (2002).
3. Umezu-Goto, M., Kishi, Y., Taira, A., *et al.* Autotaxin has lysophospholipase D activity leading to tumor cell growth and motility by lysophosphatidic acid production. *J. Cell Biol.* **158(2)**, 227-233 (2005).
4. Nam, S.W., Clair, T., Campo, C.K., *et al.* Autotaxin (ATX), a potent tumor motogen, augments invasive and metastatic potential of ras-transformed cells. *Oncogene* **19(2)**, 241-247 (2000).
5. Sun, Y.-X., Tsubio, K., Okamoto, Y., *et al.* Biosynthesis of anandamide and N-palmitoylethanolamide by sequential actions of phospholipase A<sub>2</sub> and lysophosphase D. *J. Biochem.* **380(Pt. 3)**, 749-755 (2004).
6. van Leeuwen, F.N., Giepmans, B.N.G., van Meeteren, L.A., *et al.* Lysophosphatidic acid: Mitogen and motility factor. *Biochem. Soc.* **31(Pt. 6)**, 1209-1212 (2003).
7. Murata, J., Lee, H.Y., Clair, T., *et al.* cDNA cloning of the human tumor motility-stimulation protein, autotaxin, reveals a homology with phosphodiesterases. *J. Biol. Chem.* **269(48)**, 30479-30484 (1994).

CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM