

Echelon Biosciences Inc.

Lysophosphatidic Acid Antibody (504B3)

Z-P200

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Background: Lysophosphatidic Acid (LPA) is a serum-derived phospholipid involved in diverse cellular processes such as cell proliferation, chemotaxis, platelet aggregation, wound healing, angiogenesis, tumor invasion, and smooth muscle contraction. Recent research indicates LPA may play a significant role in the pathophysiology of cancer and may be used as a biomarker for ovarian cancer.

LPA Antibody (504B3) was originally developed and patented at Lpath Therapeutics

Antibody: LPA Antibody (clone 504B3) is mouse monoclonal, IgGK₁. Supplied as an 1 mg/mL stock in PBS, pH 7.5.

Source: Monoclonal antibodies were produced via hybridoma and harvested from mouse ascites fluid. Antibodies were affinity purified using Protein G agarose.

Storage: Antibody is stable for up to 1 year at -20 °C. Antibody is stable at 4 °C for up to 60 days. Avoid repeated freeze/thaw cycles.

Applications: LPA Antibody (clone 504B3) has been tested and validated for use with direct and competitive ELISA formats, cellular immunofluorescence (IF), and immunohistochemistry (IHC) on frozen tissue sections. See product website for IF and IHC protocols.

Other in vitro and cellular applications are possible using this antibody, but have not been verified by Echelon Biosciences.

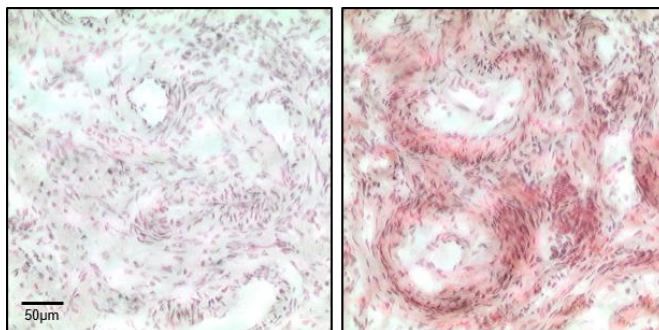
Recommended dilutions::

IF - 5-10 µg/mL

IHC - 20 µg/mL

ELISA - 1 µg/mL

Data: Immunohistochemistry



Secondary only

αLPA

Frozen human ovary tissue was sectioned at 5µm and mounted to glass histology slides. Sections were stained with either LPA Antibody (clone 504B3) in conjunction with an HRP-conjugated secondary antibody or with secondary alone. Color was developed using a DAB analog and nuclei were counterstained with hematoxylin. Sections were imaged under brightfield at 20x.

References:

Cheng J, Sahani S, Hausrat TJ, Yang J-W, Ji H, Schmarowski N, et al. (2016) Precise somatotopic thalamocortical axon guidance depends on LPA-mediated PRG-2/Radixin Signaling. *Neuron*. 92(1):126-42.

Balood, M., H. Zahednasab, et al. (2014). "Elevated serum levels of lysophosphatidic acid in patients with multiple sclerosis." *Hum Immunol*. 75(5): 411-413.

Goldshmit Y, Matteo R, Sztal T, Ellett F, Frisca F, Moreno K, et al. (2012) Blockage of lysophosphatidic acid signaling improves spinal cord injury outcomes. *The American Journal of Pathology*. 181(3):978-92.

US Patent 9,217,749 (2015); *Licensed by Echelon*



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