

PRODUCT INFORMATION

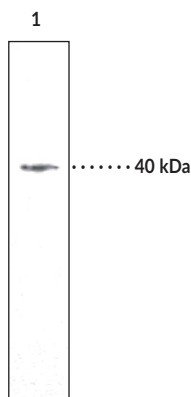


LPA₃ Polyclonal Antibody Item No. 10004840

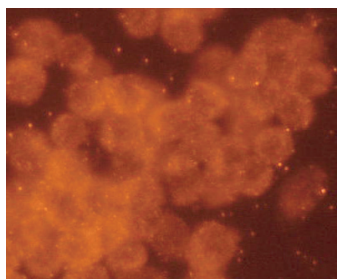
Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	EDG-7, Lysophosphatidic Acid Receptor 3
Immunogen:	Synthetic peptide from the N-terminal region of mouse protein LPA ₃
Species Reactivity:	(+) Human, mouse, and rat
Uniprot No.:	Q9UBY5
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunocytochemistry (ICC), Immunofluorescence (IF), and Western blot (WB); the recommended starting dilution for ICC is 1:80, 1:100 for IF, and 1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

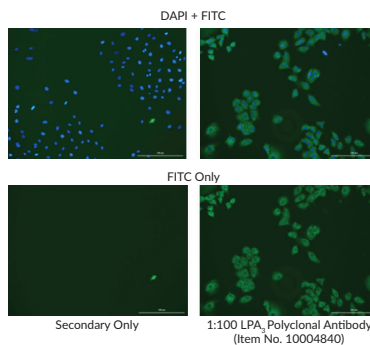
Images



Lane 1: HepG2 cell lysate (30 µg)



Immunofluorescent staining of RAW 264.7 cells with the LPA₃ Polyclonal Antibody (2.5 mg/ml). The positive reaction is visualized by a Cy3-conjugated donkey anti-rabbit secondary antibody. Note the cytoplasm staining of the receptor.



Immunofluorescence analysis of paraformaldehyde-fixed A549 cells. After incubation with LPA₃ Polyclonal Antibody (Item No. 10004840) at a 1:100 dilution (or negative control), cells were incubated with FITC-labeled anti-rabbit IgG (Item No. 10006588), followed by DAPI nuclear stain. Images show FITC alone or both fluorescence channels to highlight nuclear staining (where applicable).

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.

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Description

Lysophosphatidic acid receptor 3 (LPA₃; also known as EDG-7) is one of three LPA receptors (LPA₁, LPA₂, and LPA₃) that are members of large family of G protein-coupled receptors that also include those for sphingosine-1-phosphate (S1P₁₋₅).¹ The LPA receptors mediate many cellular responses including cytoskeletal rearrangements, cell proliferation, and inhibition of gap junction communication.^{2,3} Mouse and human LPA₃ have 353 amino acids with an estimated molecular weight of 40 kDa.^{4,5} The mRNA level of LPA₃ is high in testes, kidney, and lung but low in intestine, heart, thymus, and stomach.⁵ Cayman Chemical's LPA₃ polyclonal antibody can be used for western blot, immunofluorescence, and immunocytochemical analysis for LPA₃ on samples of human, mouse, and rat origin. Cayman's LPA₃ Polyclonal Antibody detects a protein at around 40 kDa in human HepG2 cells, mouse macrophages, and in mouse and rat liver.

References

1. Chun, J., Goetzl, E.J., Hla, T., *et al.* International union of pharmacology. XXXIV. Lysophospholipid receptor nomenclature. *Pharmacol. Rev.* **54**, 265-269 (2002).
2. Fukushima, N. and Chun, J. The LPA receptors. *Prostaglandins and Other Lipid Mediators* **64**, 21-32 (2001).
3. Contos, J.J.A., Ishii, I., and Chun, J. Lysophosphatidic Acid Receptors. *Mol. Pharmacol.* **58**, 1188-1196 (2000).
4. Bando, K., Aoki, J., Hosono, H., *et al.* Molecular cloning and characteristics of a novel human G-protein-coupled receptor, EDG7, for lysophosphatidic acid. *J. Biol. Chem.* **274(39)**, 27776-27785 (1999).
5. Contos, J.J.A. and Chun, J. The mouse lp_{A3}/Edg7 lysophosphatidic acid receptor gene: Genomic structure, chromosomal localization, and expression pattern. *Gene* **267**, 243-253 (2001).

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