

Product Information

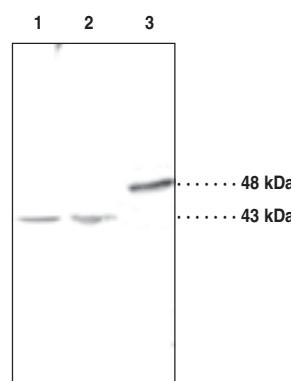


LPA₁ Polyclonal Antibody

Item No. 10005280 • Lot No. XXXXXX

- Synonyms:** EDG-2; LPA Receptor 1; LPAR₁; Vzg-1
- Contents:** This vial contains *lot specific* µg peptide affinity-purified IgG in *lot specific* µl TBS, pH 7.4, containing 30% glycerol, 0.1% BSA, and 0.02% sodium azide
- Host:** Rabbit
- Antigen:** Human LPA₁ amino acids 342-359 (DRSASSLNHTILAGVHSN)
- Cross-reactivity:** (+) Human, bovine, mouse, rat, and ovine LPA₁; other species not tested. Expected to detect chicken LPA₁ due to 100% sequence identity.
- Stability:** ≥1 year at -20°C
- Applications:** For detection of LPA₁ by western blot (WB) and immunocytochemistry (ICC). Recommended starting dilution for WB is *lot specific* µg/ml and 8 µg/ml for ICC. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

LPA₁ (also known as EDG-2) is one of four known lysophosphatidic acid (LPA) receptors (LPA₁₋₄).¹ LPA₁₋₃ are part a family of G protein-coupled receptors that share identity to the sphingosine-1-phosphate receptors (S1P₁₋₅).² LPA₁ couples with three types of G proteins, G_{1/o}, G_q, and G_{12/13} to induce a range of cellular responses including activation of phospholipase C, multiple kinases, the serum response element and cell proliferation.^{3,4} LPA₁ mRNA is detected a wide range of tissues and cells including brain, heart, small intestine, spleen, testis, kidney, HeLa cells, and A549 cells.^{5,6} Mouse and human LPA₁ have 364 amino acids with an estimated molecular weight of 41 kDa.⁴ Cayman's LPA₁ polyclonal antibody detects the protein from several species from 43-50 kDa, suggesting heterogeneous LPA₁ post-translational modifications in distinct cells.



Lane 1: Murine liver, solubilized 100,000 x g pellet (50 µg)
Lane 2: A549 cell lysate (40 µg)
Lane 3: Rat liver lysate (40 µg)

References

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- An, S., Bleu, T., Hallmark, O.G., *et al.* Characterization of a novel subtype of human G protein-coupled receptor for lysophosphatidic acid. *J. Biol. Chem.* **273**(14), 7906-7910 (1998).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10005280

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.

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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