Product Information

Endothelial Lipase Polyclonal Antibody

Item No. 100030 • Lot. No. XXXXX

Synonyms: EDL; EL

Contents: This vial contains (100-500 µg of peptide affinity-purified IgG, ***lot specific***) in 500 µl TBS, pH 7.4, containing 50% glycerol, ***lot specific*** mg/ml BSA, and 0.02% sodium azide.

Host: Rabbit

Antigen: Human endothelial lipase amino acids 19-32. The antigen alignment with other known species sequences:

Human A G S P V P F G P E G R L E
Mouse A G S i t t l r P q G s L r

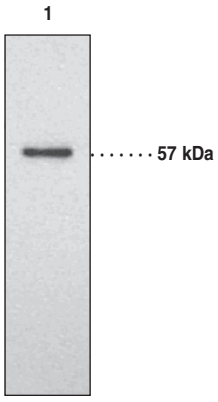
Cross-reactivity: (+) Human, rat, mouse, porcine, and ovine endothelial lipase

Storage: ≥1 year at -20°C

Applications: Western blotting and immunohistochemistry (IHC) recommended starting dilutions: western blotting: ***lot specific*** µg/ml; IHC (formalin-fixed paraffin-embedded sections): 2 µg/ml. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Concentration: Varies by lot, from 0.2-1.0 mg/ml (100-500 µg/vial). Always 100 ml final working volume for western blotting.

Endothelial lipase (EL) is a member of the triglyceride lipase gene family. It functions primarily as a phospholipase and has low triglyceride lipase activity. It has been shown to be a major genetic determinant for the concentration, structure, and metabolism of high-density lipoprotein, which protects against atherosclerosis.[1,2] It was originally cloned from endothelial cells and was found to be expressed in a distinct and complementary tissue-restricted fashion, with high-level expression in the liver, placenta, lung, ovary, and macrophage.[3] The wide spread distribution of this protein suggests that it plays a general role in lipid metabolism. Immunohistochemical studies demonstrate that EL is expressed in infiltrating cells such as macrophages within atheromatous plaques, in addition to endothelial and smooth muscle cells in non-atherosclerotic coronary arteries. Furthermore, EL expression is detected in the neovasculature within atheromatous plaques in atherosclerotic coronary arteries, indicating that EL may have unique functional roles in atherosclerosis.[4] Human endothelial lipase has an estimated molecular weight of 57 kDa.



Lane 1: HepG2 cell lysate (~30 µg)

References

1. Ishida, T., Choi, S., Kundu, R.K., *et al.* Endothelial lipase is a major determinant of HDL level. *J. Clin. Invest.* **111(3)**, 347-355 (2003).
2. Ma, K., Cilingiroglu, M., Otvos, J.D., *et al.* Endothelial lipase is a major genetic determinant for high-density lipoprotein concentration, structure, and metabolism. *Proc. Natl. Acad. Sci. USA* **100(5)**, 2748-2753 (2003).
3. Hirata, K-i., Dichek, H.L., Cioffi, J.A., *et al.* Cloning of a unique lipase from endothelial cells extends the lipase gene family. *J. Biol. Chem.* **274(20)**, 14170-14175 (2003).
4. Azumi, H., Hirata, K-i., Ishida, T., *et al.* Immunohistochemical localization of endothelial cell-derived lipase in atherosclerotic human coronary arteries. *Cardiovascular Res.* **58**, 647-654 (2003).

Related Products

Oxidized Lipid HPLC Mixture - Item No. 34004 • 9(R)-HODE cholesteryl ester - Item No. 38406 • 9(S)-HODE cholesteryl ester - Item No. 38411 • (±)13-HODE cholesteryl ester - Item No. 38601 • 13(R)-HODE cholesteryl ester - Item No. 38606 • 13(S)-HODE cholesteryl ester - Item No. 38611 • Cholesteryl Linoleate Hydroperoxides - Item No. 48001 • Azelaoyl PAF - Item No. 60924 • CD36 Polyclonal Antibody - Item No. 100011 • Monoglyceride Lipase Polyclonal Antibody - Item No. 100035 • CD36 Monoclonal Antibody - Item No. 188150 • CD36 Blocking Peptide - Item No. 300011 • Enodthelial Lipase (human) Blocking Peptide - Item No. 10004111

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