

Product Information



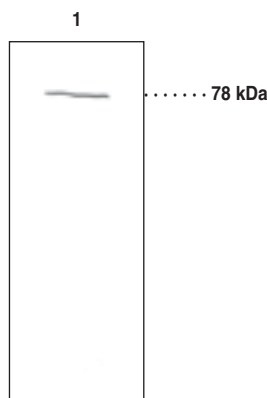
5-Lipoxygenase Polyclonal Antibody

Item No. 160402 • Lot No. XXXXX

Contents:	This vial contains (50-500 µg of peptide affinity-purified IgG, <i>lot specific</i>)
Host:	Rabbit
Stability:	≥2 years at -20°C
Antigen:	Synthetic peptide from the human/rat 5-lipoxygenase (5-LO) sequence, (amino acids 130-149 - QHRRKELETRQKQYRWMEWN). The sequence is 95% homologous to 5-LO from mouse and hamster.
Cross-reactivity:	(+) Human, rat, mouse, hamster, and porcine 5-LO; (-) 12-LO and 15-LO Homology of peptide antigen with 5-LO from other species: Human Q H R R K E L E T R Q K Q Y R W M E W N Rat Q H R R K E L E T R Q K Q Y R W M E W N Mouse Q H R R K E L E a R Q K Q Y R W M E W N Hamster Q H R R K E L E a R Q K Q Y R W M E W N
Applications:	Western blot
Concentration:	Varies by lot, from 0.1-1.0 mg/ml (50-500 µg/vial). Always 100 µl final working volume for western blotting.

This vial contains rabbit antibody against a peptide from the human/rat 5-lipoxygenase (5-LO) sequence. For long term storage, we suggest the antibody be stored as supplied at -20°C; it should be stable for at least two years. For immunoblotting experiments, use the antibody at a 1:1000 dilution. For immunohistochemistry and immunofluorescence use a dilution of approximately 1:50 - 250.¹⁻³

5-LO catalyzes the formation of 5(S)-HpETE from arachidonic acid as well as its subsequent conversion to leukotriene A₄.⁴ 5-LO is located in the cytosol of quiescent cells. Upon stimulation of the cell, 5-LO translocates to the nuclear membrane where it is found in association with 5-LO activating protein (FLAP) and with the 85 kDa cPLA₂.^{5,6} 5-LO has a molecular mass of approximately 78 kDa. The enzyme is predominately expressed in peripheral blood leukocytes and also in eosinophils, mast cells, epithelial cells, and alveolar macrophages isolated from lung.⁷



Lane 1: Porcine leukocyte 100,000 x g supernatant

References

1. Mehrabian, M., Allayee, H., Wong, J., *et al. Circ. Res.* **91**, 120-126 (2002).
2. Chen, N., Restivo, A., and Reiss, C.S. *Prostaglandins and Other Lipid Mediators* **67**, 143-155 (2002).
3. Uz, T., Dwivedi, Y., Savani, P.D., *et al. J. Neurochem.* **73**, 693-699 (1999).
4. Shimizu, T., Rådmark, O., and Samuelsson, B. *Proc. Natl. Acad. Sci. USA* **81**, 689-693 (1984).
5. Poulriot, M., McDonald, P.P., Krump, E., *et al. Eur. J. Biochem.* **238**, 250-258 (1996).
6. Brock, T.G., McNish, R.W., Bailie, M.B., *et al. J. Biol. Chem.* **272**, 8276-8280 (1997).
7. Komatsu, N., Natsui, K., Ueda, N., *et al. J. Histochem. Cytochem.* **39**, 655-662 (1991).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/160402

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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