

PRODUCT INFORMATION



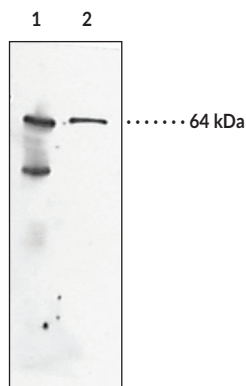
Soluble Epoxide Hydrolase (FL) Polyclonal Antibody

Item No. 13560

Overview and Properties

Contents:	This vial contains 100 µg of protein-A purified polyclonal antibody.
Synonyms:	Cytosolic Epoxide Hydrolase (CEH), EPHX2, Epoxide Hydrolase 2, sEH
Immunogen:	Recombinant mouse sEH
Cross Reactivity:	Other species not tested
Species Reactivity:	(+) Mouse
Uniprot No.:	P34914
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Application:	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Murine liver 10,000 x g supernatant
Lane 2: Purified murine sEH

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

Soluble epoxide hydrolase (sEH) is a member of the α/β -hydrolase fold enzyme family that catalyzes the hydrolysis of bioactive fatty acid epoxides to inactive vicinal diols.¹ It is a homodimer in which each subunit is composed of two domains, a C-terminal epoxide hydrolase domain and an N-terminal phosphatase domain.^{2,3} sEH is localized to the cytoplasm or to peroxisomes in a tissue specific manner and is found in various tissues, including skin, lung, uterus, kidney, brain, and myocardium.^{4,5} sEH is also expressed in the vasculature and inhibition of sEH attenuates pathogenic vascular remodeling and hypertension via preservation of cardioprotective epoxyeicosatrienoic acids (EETs) in rat models of atherosclerosis and hypertension, respectively.⁶ Inhibition of sEH also has a protective role in various diseases including inflammatory bowel disease, osteoarthritis, seizure, stroke, and Alzheimer's disease, as well as in various chronic pain states.^{1,7} Cayman's Soluble Epoxide Hydrolase (FL) Polyclonal Antibody can be used for Western blot applications. The antibody recognizes sEH at 64 kDa from human and murine samples.

References

1. Harris, T.R. and Hammock, B.D. Soluble epoxide hydrolase: Gene structure, expression and deletion. *Gene* **526**(2), 61-74 (2013).
2. Cronin, A., Mowbray, S., Dürk, H., *et al.* The N-terminal domain of mammalian soluble epoxide hydrolase is a phosphatase. *Proc. Natl. Acad. Sci. USA* **100**(4), 1552-1557 (2002).
3. Chiamvimonvat, N., Ho, C.M., Tsai, H.J., *et al.* The soluble epoxide hydrolase as a pharmaceutical target for hypertension. *J. Cardiovasc. Pharmacol.* **50**(3), 225-237 (2007).
4. Domingues, M.F., Callai-Silva, N., Piovesan, A.R., *et al.* Soluble epoxide hydrolase and brain cholesterol metabolism. *Front. Mol. Neurosci.* **12**, 325 (2020).
5. Enayetallah, A.E., French, R.A., Barber, M., *et al.* Cell-specific subcellular localization of soluble epoxide hydrolase in human tissues. *J. Histochem. Cytochem.* **54**(3), 329-335 (2006).
6. Simpkins, A.N., Rudic, R.D., Roy, S., *et al.* Soluble epoxide hydrolase inhibition modulates vascular remodeling. *Am. J. Physiol. Heart Circ. Physiol.* **298**(3), H795-H806 (2009).
7. Wagner, K.M., McReynolds, C.B., Schmidt, W.K., *et al.* Soluble epoxide hydrolase as a therapeutic target for pain, inflammatory and neurodegenerative diseases. *Pharmacol. Ther.* **180**, 62-76 (2017).

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