PRODUCT INFORMATION

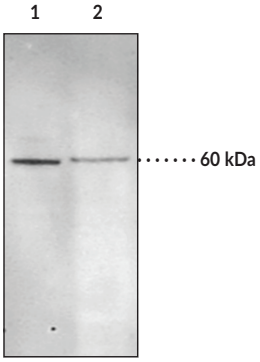
Soluble Epoxide Hydrolase Polyclonal Antibody

Item No. 10010146

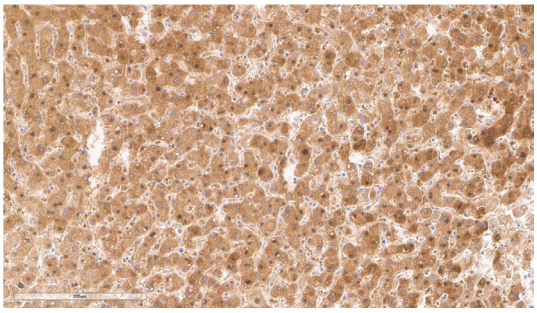
Overview and Properties

Contents: This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms: Cytosolic Epoxide Hydrolase (CEH), EPHX2, Epoxide Hydrolase 2, sEH
Immunogen: Synthetic peptide from the internal region of human sEM
Species Reactivity: (+) Human, mouse, and rat; other species not tested
Uniprot No.: P34913
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.

Images



Lane 1: Human liver 10,000 x g supernatant (30 µg)
Lane 2: Mouse liver 10,000 x g supernatant (60 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human liver tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with Soluble Epoxide Hydrolase Polyclonal Antibody (Item No. 10010146) at a 1:40 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

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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 Polyclonal Antibody can be used for Western blot. The antibody recognizes sEH at approximately 64 kDa from human, mouse, and rat samples.

References

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