

# PRODUCT INFORMATION



## Soluble Epoxide Hydrolase (human, recombinant)

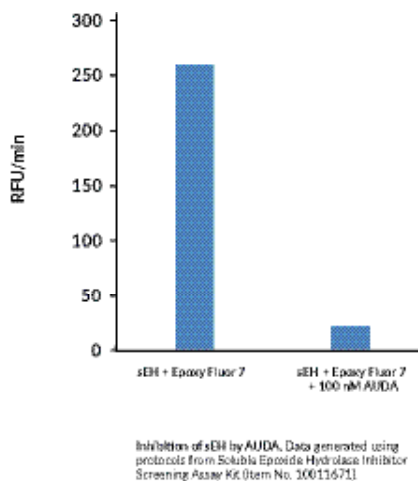
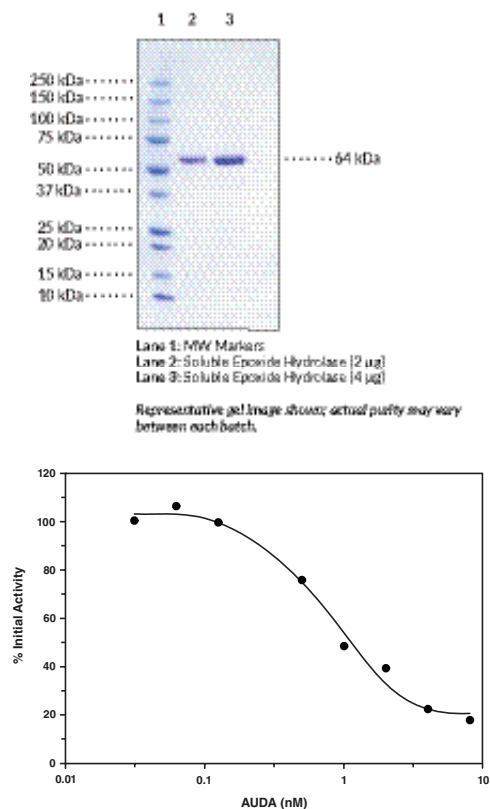
Item No. 10011669

### Overview and Properties

**Synonyms:** Cytosolic Epoxide Hydrolase (CEH), EPHX2, Epoxide Hydrolase 2, sEH  
**Source:** Active recombinant human N-terminal His-tagged sEH expressed in insect cells  
**Amino Acids:** 2-555 (full length)  
**Uniprot No.:** P34913  
**Molecular Weight:** 64 kDa  
**Storage:** -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein  
**Stability:** ≥2 years  
**Purity:** ≥95% estimated by SDS-PAGE  
**Supplied in:** TBS, pH 7.4, with 20% glycerol  
**Protein Concentration:** *batch specific* mg/ml  
**Activity:** *batch specific* U/ml  
**Specific Activity:** *batch specific* U/mg  
**Unit Definition:** One unit hydrolyzes 1 nmol/min of PHOME (Item No. 10009134) at 37°C. Detected by fluorescence of product; Ex. 330 nm, Em. 465 nm and measured against a standard curve of 6-methoxy-2-naphthaldehyde.

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Images



**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

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Soluble epoxide hydrolase (sEH) is a member of the  $\alpha/\beta$ -hydrolase fold enzyme family that catalyzes the hydrolysis of bioactive fatty acid epoxides to inactive vicinal diols.<sup>1</sup> 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.<sup>2,3</sup> 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.<sup>4,5</sup> 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.<sup>6</sup> 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.<sup>1,7</sup> Cayman's Soluble Epoxide Hydrolase (human, recombinant) protein can be used for enzyme activity assays.

## References

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