

**ETHE1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6641b****Specification**

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**ETHE1 Antibody (C-term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P,E            |
| Primary Accession | <a href="#">O95571</a> |
| Reactivity        | Human, Mouse           |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 27873                  |
| Antigen Region    | 180-209                |

**ETHE1 Antibody (C-term) - Additional Information****Gene ID** 23474**Other Names**

Persulfide dioxygenase ETHE1, mitochondrial, Ethylmalonic encephalopathy protein 1, Hepatoma subtracted clone one protein, Sulfur dioxygenase ETHE1, ETHE1, HSCO

**Target/Specificity**

This ETHE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 180-209 amino acids from the C-terminal region of human ETHE1.

**Dilution**

WB~~1:1000

IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ETHE1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ETHE1 Antibody (C-term) - Protein Information****Name** ETHE1

## Synonyms HSCO

**Function** Sulfur dioxygenase that plays an essential role in hydrogen sulfide catabolism in the mitochondrial matrix. Hydrogen sulfide (H<sub>2</sub>S) is first oxidized by SQRDL, giving rise to cysteine persulfide residues. ETHE1 consumes molecular oxygen to catalyze the oxidation of the persulfide, once it has been transferred to a thiophilic acceptor, such as glutathione (R-SSH). Plays an important role in metabolic homeostasis in mitochondria by metabolizing hydrogen sulfide and preventing the accumulation of supraphysiological H<sub>2</sub>S levels that have toxic effects, due to the inhibition of cytochrome c oxidase. First described as a protein that can shuttle between the nucleus and the cytoplasm and suppress p53-induced apoptosis by sequestering the transcription factor RELA/NFKB3 in the cytoplasm and preventing its accumulation in the nucleus (PubMed:[12398897](#)).

## Cellular Location

Cytoplasm. Nucleus. Mitochondrion matrix

## Tissue Location

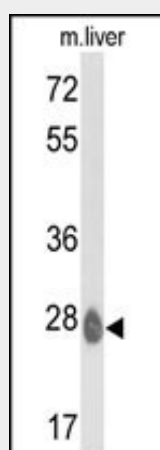
Ubiquitously expressed.

## ETHE1 Antibody (C-term) - Protocols

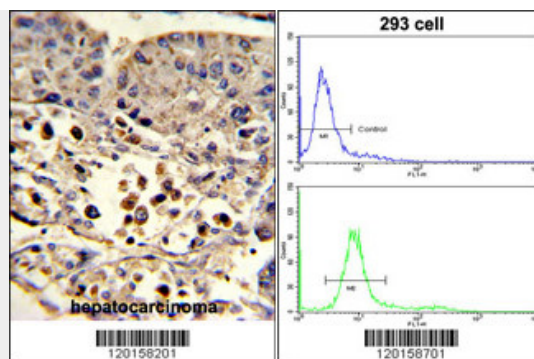
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## ETHE1 Antibody (C-term) - Images



Western blot analysis of ETHE1 Antibody (C-term) (Cat. #AP6641b) in mouse liver tissue lysates (35ug/lane).ETHE1 (arrow) was detected using the purified Pab.



(LEFT) Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ETHE1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. (RIGHT) Flow cytometric analysis of 293 cells using ETHE1 Antibody (C-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **ETHE1 Antibody (C-term) - Background**

ETHE1 is a sulfur dioxygenase that localizes within the mitochondrial matrix. The enzyme functions in sulfide catabolism. Mutations in its gene result in ethylmalonic encephalopathy.

### **ETHE1 Antibody (C-term) - References**

Tiranti, V., Nat. Med. 15 (2), 200-205 (2009)  
Mineri, R., J. Med. Genet. 45 (7), 473-478 (2008)