

**ETHE1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP6641c****Specification**

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**ETHE1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O95571](#)**ETHE1 Antibody (Center) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP6641c](/products/AP6641c) was selected from the Center region of human ETHE1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ETHE1 Antibody (Center) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/12398897" target="\_blank">12398897</a>).

**Cellular Location**

Cytoplasm. Nucleus. Mitochondrion matrix

**Tissue Location**

Ubiquitously expressed.

**ETHE1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ETHE1 Antibody (Center) Blocking Peptide - Images****ETHE1 Antibody (Center) Blocking Peptide - 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 (Center) Blocking Peptide - References**

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