ETHE1 (B-12): sc-393869

**BACKGROUND**

ETHE1 (ethylmalonic encephalopathy 1), also known as HSCO (hepatoma subtracted clone one protein), is a 254 amino acid protein belonging to the metallo-β-lactamase superfamily and glyoxalase II family. Localizing to the cytoplasm, nucleus and mitochondrion matrix, ETHE1 is ubiquitously expressed and may function in sulfide catabolism. ETHE1 binds two zinc ions per subunit and interacts directly with RELA, preventing its localization to the nucleus thus leading to suppressed p53-dependent apoptosis. The gene encoding ETHE1 maps to human chromosome 19q13.31. Mutations to this gene result in ethylmalonic encephalopathy, an infantile metabolic disorder characterized by recurrent petechiae, acrocyanosis, and death within the first decade of life.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ETHE1 (human) mapping to 19q13.31; Ethe1 (mouse) mapping to 7 A3.

**SOURCE**

ETHE1 (B-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 185-214 within an internal region of ETHE1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG human kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ETHE1 (B-12) is available conjugated to agarose (sc-393869 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393869 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-393869 PE), fluorescein (sc-393869 FITC), Alexa Fluor® 488 (sc-393869 AF488), Alexa Fluor® 546 (sc-393869 AF546), Alexa Fluor® 594 (sc-393869 AF594) or Alexa Fluor® 647 (sc-393869 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-393869 AF680) or Alexa Fluor® 790 (sc-393869 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393869 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

ETHE1 (B-12) is recommended for detection of ETHE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysates)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ETHE1 siRNA (h): sc-97755, ETHE1 siRNA (m): sc-144957, ETHE1 shRNA Plasmid (h): sc-97755-SH, ETHE1 shRNA Plasmid (m): sc-144957-SH, ETHE1 shRNA (h) Lentiviral Particles: sc-97755-V and ETHE1 shRNA (m) Lentiviral Particles: sc-144957-V.

Molecular Weight of ETHE1: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2224.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgG® HRP: sc-516102 or m-IgG® BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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