SANTA CRUZ BIOTECHNOLOGY, INC.

ETHE1 (Y-13): sc-161566

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-induced 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 high levels of ethylmalonic acid, neurodevelopmental delay and regression, recurrent petechiae, acrocyanosis, and death within the first decade of life.

CHROMOSOMAL LOCATION

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

SOURCE

ETHE1 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ETHE1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161566 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ETHE1 (Y-13) is recommended for detection of ETHE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

ETHE1 (Y-13) is also recommended for detection of ETHE1 in additional species, including equine and bovine.

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.

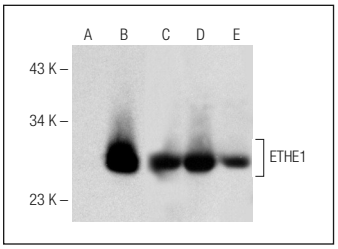
Molecular Weight of ETHE1: 28 kDa.

Positive Controls: ETHE1 (h): 293T Lysate: sc-110987, SW480 cell lysate: sc-2219 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ETHE1 (Y-13): sc-161566. Western blot analysis of ETHE1 expression in non-transfected 293T: sc-117752 (**A**), human ETHE1 transfected 293T: sc-110987 (**B**), Jurkat (**C**), SW480 (**D**) and HeLa (**E**) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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