

TERE1 (H-8): sc-377013

BACKGROUND

Transitional epithelial response protein 1 (TERE1), also designated UbiA prenyltransferase domain containing protein 1 (UBIAD1), belongs to the UbiA prenyltransferase family of proteins. The gene encoding for the protein is similar to the *Drosophila* protein heix, and influences progression of prostate and bladder cancers. There appears to be a decrease in TERE1 transcript in prostate carcinoma and a loss of the TERE1 protein in metastatic prostate. It is a ubiquitously expressed multi-pass membrane protein but it can also be detected in the cytoplasm or nucleus. The TERE1 transcript (1.5 and 3.5 kb) is present in most normal human tissues, including Urothelium.

CHROMOSOMAL LOCATION

Genetic locus: UBIAD1 (human) mapping to 1p36.22; Ubiad1 (mouse) mapping to 4 E2.

SOURCE

TERE1 (H-8) is a mouse monoclonal antibody raised against amino acids 1-135 mapping at the N-terminus of TERE1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TERE1 (H-8) is available conjugated to agarose (sc-377013 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377013 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377013 PE), fluorescein (sc-377013 FITC), Alexa Fluor® 488 (sc-377013 AF488), Alexa Fluor® 546 (sc-377013 AF546), Alexa Fluor® 594 (sc-377013 AF594) or Alexa Fluor® 647 (sc-377013 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377013 AF680) or Alexa Fluor® 790 (sc-377013 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

TERE1 (H-8) is recommended for detection of TERE1 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 lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 TERE1 siRNA (h): sc-61667, TERE1 siRNA (m): sc-61668, TERE1 shRNA Plasmid (h): sc-61667-SH, TERE1 shRNA Plasmid (m): sc-61668-SH, TERE1 shRNA (h) Lentiviral Particles: sc-61667-V and TERE1 shRNA (m) Lentiviral Particles: sc-61668-V.

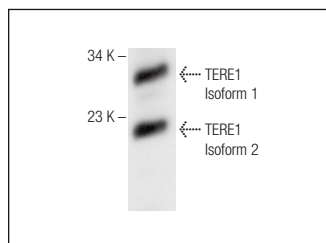
Molecular Weight of TERE1: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

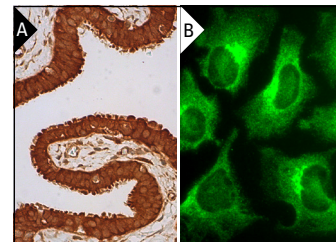
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TERE1 (H-8): sc-377013. Western blot analysis of TERE1 expression in HeLa whole cell lysate.



TERE1 (H-8): sc-377013. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and nuclear staining of glandular cells (A). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (B).

SELECT PRODUCT CITATIONS

- Schumacher, M.M., et al. 2015. The prenyltransferase UBIAD1 is the target of geranylgeraniol in degradation of HMG CoA reductase. *Elife* 4: e05560.
- Schumacher, M.M., et al. 2016. Geranylgeranyl-regulated transport of the prenyltransferase UBIAD1 between membranes of the ER and Golgi. *J. Lipid Res.* 57: 1286-1299.
- Yan, B., et al. 2019. UBIAD1 expression is associated with cardiac hypertrophy in spontaneously hypertensive rats. *Mol. Med. Rep.* 19: 651-659.
- Arslanbaeva, L., et al. 2022. UBIAD1 and CoQ10 protect melanoma cells from lipid peroxidation-mediated cell death. *Redox Biol.* 51: 102272.
- Goto, S., et al. 2023. Menahydroquinone-4 may play a key role in regulating CCL5 expression induced by epidermal growth factor receptor inhibitors. *Sci. Rep.* 13: 22102.

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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