



ICMT (E-13): sc-161722

BACKGROUND

ICMT (isoprenylcysteine carboxylmethyltransferase), also known as PCCMT, HSTE14 or PPMT, is a 284 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and belongs to the isoprenylcysteine O-methyltransferase family. Expressed ubiquitously, with highest expression in brain tissue, ICMT uses divalent cations (such as zinc) to catalyze the post-translational methylation of isoprenylated C-terminal cysteine residues. Specifically, ICMT functions as the third of three enzymes that modify isoprenylated C-terminal cysteine residues on target proteins, thereby targeting those proteins to the cell membrane. Inhibition of ICMT effects Ras function and causes endothelial apoptosis, an event that may lead to a decrease in oncogenic transformation. Multiple isoforms of ICMT exist due to alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ICMT (human) mapping to 1p36.31; Icmt (mouse) mapping to 4 E2.

SOURCE

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

STORAGE

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

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-161722 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ICMT (E-13) is recommended for detection of ICMT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ICMT siRNA (h): sc-88830, ICMT siRNA (m): sc-146137, ICMT shRNA Plasmid (h): sc-88830-SH, ICMT shRNA Plasmid (m): sc-146137-SH, ICMT shRNA (h) Lentiviral Particles: sc-88830-V and ICMT shRNA (m) Lentiviral Particles: sc-146137-V.

Positive Controls: SK-BR-3 cell lysate: sc-2218, HeLa whole cell lysate: sc-2200 or T4D7D whole cell lysate.

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) 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.

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.