

ERG25 (Y-21): sc-133556

BACKGROUND

Belonging to the sterol desaturase family, ERG25, also known as C-4 methylsterol oxidase or Methylsterol monooxygenase, is a 293 amino acid enzyme that performs the first of three enzymatic steps required to remove the two methyl groups leading to cholesterol. ERG25 is a multi-pass membrane protein that resides within the plasma membrane and the membrane of the endoplasmic reticulum. Concentrations of ERG25 mRNA increase when subjected to low iron growth conditions, suggesting that the enzyme is not regulated by iron but by an end product of the ergosterol pathway. Low-density lipoprotein (LDL) downregulates ERG25 expression in the vascular wall, an event that may be inhibited via SREBP overexpression. ERG25 is encoded by a gene located on human chromosome 4q32.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SC4MOL (human) mapping to 4q32.3; Sc4mol (mouse) mapping to 8 B3.1.

RESEARCH USE

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

SOURCE

ERG25 (Y-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic ERG25 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ERG25 (Y-21) is recommended for detection of ERG25 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

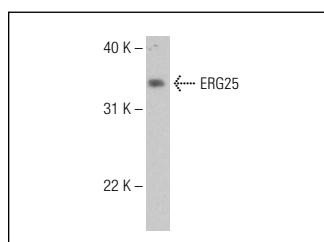
Suitable for use as control antibody for ERG25 siRNA (h): sc-88916, ERG25 siRNA (m): sc-144926, ERG25 shRNA Plasmid (h): sc-88916-SH, ERG25 shRNA Plasmid (m): sc-144926-SH, ERG25 shRNA (h) Lentiviral Particles: sc-88916-V and ERG25 shRNA (m) Lentiviral Particles: sc-144926-V.

Molecular Weight of ERG25: 34, 75 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



ERG25 (Y-21): sc-133556. Western blot analysis of ERG25 expression in human fetal liver tissue extract.

STORAGE

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

PROTOCOLS

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