**BACKGROUND**

CH25H (Cholesterol 25-hydroxylase), also known as h25OH, is a 272 amino acid endoplasmic membrane protein that belongs to the sterol desaturase family. CH25H contains clusters of histidine residues essential for catalytic activity and is involved in cholesterol and lipid metabolism. CH25H catalyzes the formation of 25-hydroxycholesterol from cholesterol leading to the repression of cholesterol biosynthetic enzymes. CH25H regulates lipid metabolism by synthesizing a corepressor that blocks sterol regulatory element binding protein (SREBP) processing. CH25H utilizes diiron cofactors to catalyze the hydroxylation of hydrophobic substrates.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CH25H (human) mapping to 10q23.31; CH25h (mouse) mapping to 19 C1.

**SOURCE**

CH25H (1G8) is a mouse monoclonal antibody raised against amino acids 142-247 of CH25H of human origin.

**PRODUCT**

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with ≤0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

CH25H (1G8) is recommended for detection of CH25H of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (starting 1 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).


Molecular Weight (predicted) of CH25H: 32 kDa.

Molecular Weight (observed) of CH25H: 36 kDa.

Positive Controls: c4 whole cell lysate: sc-364186 or RAT2 whole cell lysate: sc-364198.

**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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

CH25H (1G8): sc-293256. Western blot analysis of CH25H expression in c4 (A) and RAT2 (B) whole cell lysates.

**STORAGE**

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