10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CH25H (RABBIT) Antibody
CH25H Antibody
Catalog # ASR5760

Specification

Anti-CH25H (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-CH25H Antibody has been tested in ELISA, WB, and IHC. Expect a band at ~31.7kDa in western blot using appropriate tissues or lysates. Positive control used: Human Kidney Tissues in Immunohistochemistry.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-CH25H antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region of human CH25H conjugated to Keyhole Limpet Hemocyanin (KLH).**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-CH25H (RABBIT) Antibody - Additional Information

Gene ID 9023

Other Names
9023

Purity
This affinity purified antibody is directed against human CH25H. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence and 92% homology to pig, 91% homology to rat, and 75% homology to mouse.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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Anti-CH25H (RABBIT) Antibody - Protein Information

Name CH25H (HGNC:1907)

Function
Catalyzes the formation of 25-hydroxycholesterol from cholesterol, leading to repress cholesterol biosynthetic enzymes (PubMed:9852097). Plays a key role in cell positioning and movement in lymphoid tissues: 25-hydroxycholesterol is an intermediate in biosynthesis of 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC), an oxysterol that acts as a ligand for the G protein-coupled receptor GPR183/EBI2, a chemotactic receptor for a number of lymphoid cells (By similarity). May play an important role in regulating lipid metabolism by synthesizing a corepressor that blocks sterol regulatory element binding protein (SREBP) processing (PubMed:9852097). As an interferon- stimulated gene, has broad antiviral activities against a wide range of enveloped viruses, such as vesicular stomatitis virus (VSV) and SARS coronavirus-2 (SARS-CoV-2). Its product, 25-hydroxycholesterol, activates the ER-localized enzyme ACAT to induce internalization of accessible cholesterol on the plasma membrane and restricts SARS-CoV-2 S protein-mediated fusion which inhibits virus replication (PubMed:32944968, PubMed:33239446). In testis, production of 25- hydroxycholesterol by macrophages plays a role in Leydig cell differentiation (By similarity). Required to restrain inflammation in macrophages: production of 25-hydroxycholesterol protects macrophages from cholesterol overload, thereby preventing mitochondrial DNA release and subsequent activation of the AIM2 inflammasome (By similarity).

Cellular Location
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z0F5}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9Z0F5}

Anti-CH25H (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CH25H (RABBIT) Antibody - Images

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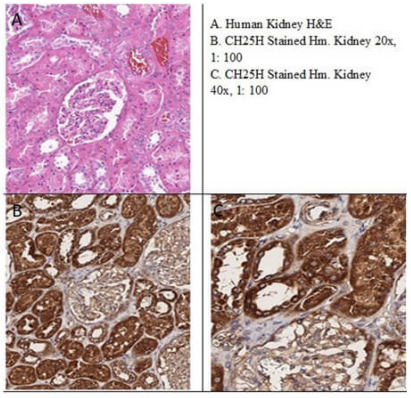

Immunohistochemistry of Rabbit Anti-CH25H Antibody. Tissue: Human Kidney. Fixative: None. Antigen Retrieval: HIER using Citrate Buffer for 20 minutes. Primary Antibody: Anti-CH25H at 1:100 for 30 min at RT. Secondary Antibody: Anti-Rabbit Poly-HRP IgG Ready-to-Use for 8 minutes at RT. Counterstain: Hematoxylin. Substrate: DAB. Staining: (A) Negative control. (B) 20X. (C) 40X. Results: Shows strong cytoplasmic staining of renal tubular epithelium.

Anti-CH25H (RABBIT) Antibody - Background

CH25H (Cholesterol 25-Hydroxylase catalyzes the formation of 25-hydroxycholesterol from cholesterol, leading to repress cholesterol biosynthetic enzymes. CH25H plays a key role in cell positioning and movement in lymphoid tissues: 25-hydroxycholesterol is an intermediate in biosynthesis of 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC), an oxysterol that acts as a ligand for the G protein-coupled receptor GPR183/EBI2, a chemotactic receptor for several lymphoid cells. It may play an important role in regulating lipid metabolism by synthesizing a corepressor that blocks sterol regulatory element binding protein (SREBP) processing. In testis, production of 25-hydroxycholesterol by macrophages may play a role in Leydig cell differentiation. Anti-CH25H Antibody is useful for researchers interested in Alzheimer’s Disease, Neuroscience, and metabolism.