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CH25H Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22272a

Specification

CH25H Antibody (N-Term) - Product Information

Application	**WB,E**
Primary Accession	O95992
Other Accession	Q4G1G8
Reactivity	**Human, Mouse**
Predicted	**Pig**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**31745**
Antigen Region	**47-76**

CH25H Antibody (N-Term) - Additional Information

Gene ID 9023

Other Names
Cholesterol 25-hydroxylase, 1.14.99.38, Cholesterol 25-monooxygenase, h25OH, CH25H

Target/Specificity
This CH25H antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 47-76 amino acids from human CH25H.

Dilution
WB~~1:1000-1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CH25H Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

CH25H Antibody (N-Term) - 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).

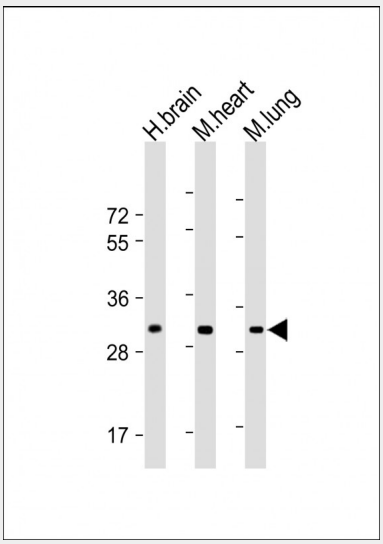
Cellular Location
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z0F5}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9Z0F5}

CH25H Antibody (N-Term) - 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

CH25H Antibody (N-Term) - Images



All lanes : Anti-CH25H Antibody (N-Term) at 1:1000-1:2000 dilution Lane 1: Human brain lysate

Lane 2: Mouse heart lysate Lane 3: Mouse lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 32 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CH25H Antibody (N-Term) - Background

Catalyzes the formation of 25-hydroxycholesterol from cholesterol, leading to repress cholesterol biosynthetic enzymes. 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.

CH25H Antibody (N-Term) - References

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