

**CH25H Antibody (N-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22272a****Specification**

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**CH25H Antibody (N-Term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O95992</a>
Other Accession	<a href="#">Q4G1G8</a>
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

**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

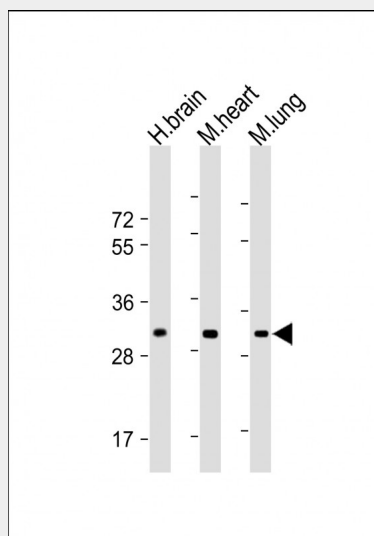
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z0F5}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9Z0F5}

#### 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 Cytometry](#)
- [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**

- Lund E.G.,et al.J. Biol. Chem. 273:34316-34327(1998).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Deloukas P.,et al.Nature 429:375-381(2004).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Riemenschneider M.,et al.Neurobiol. Aging 25:1305-1308(2004).