

## **DHCR24 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2840a

### **Specification**

## **DHCR24 Antibody (N-term) - Product Information**

Application WB,E
Primary Accession Q15392

Other Accession
Reactivity

Q8VCH6, Q60HC5
Human, Mouse

Predicted Monkey
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 60101
Antigen Region 57-87

# DHCR24 Antibody (N-term) - Additional Information

#### **Gene ID 1718**

#### **Other Names**

Delta(24)-sterol reductase, 24-dehydrocholesterol reductase, 3-beta-hydroxysterol delta-24-reductase, Diminuto/dwarf1 homolog, Seladin-1, DHCR24, KIAA0018

## Target/Specificity

This DHCR24 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 57-87 amino acids from the N-terminal region of human DHCR24.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **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**

DHCR24 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **DHCR24 Antibody (N-term) - Protein Information**

## Name DHCR24



### Synonyms KIAA0018

**Function** Catalyzes the reduction of the delta-24 double bond of sterol intermediates during cholesterol biosynthesis (PubMed:<u>11519011</u>, PubMed:<u>21671375</u>, PubMed:<u>22178193</u>, PubMed:<u>25637936</u>). In addition to its cholesterol-synthesizing activity, can protect cells from oxidative stress by reducing caspase 3 activity during apoptosis induced by oxidative stress (PubMed:<u>11007892</u>, PubMed:<u>22010141</u>). Also protects against amyloid-beta peptide-induced apoptosis (PubMed:<u>11007892</u>).

#### **Cellular Location**

Endoplasmic reticulum membrane; Single-pass membrane protein. Golgi apparatus membrane; Single-pass membrane protein

#### **Tissue Location**

Highly expressed in brain and adrenal gland with moderate expression in liver, lung, spleen, prostate and spinal cord Low expression in heart, uterus and prostate. Undetectable in blood cells. In the brain, strongly expressed in cortical regions, substantia nigra, caudate nucleus, hippocampus, medulla oblongata and pons. In brains affected by Alzheimer disease, expression in the inferior temporal lobe is substantially lower than in the frontal cortex

#### **DHCR24 Antibody (N-term) - Protocols**

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

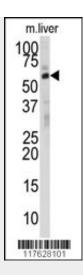
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# DHCR24 Antibody (N-term) - Images



Western blot analysis of anti-DHCR24 Antibody (N-term) (Cat.#AP2851a) in HepG2 cell line lysates (35ug/lane). DHCR24 (arrow) was detected using the purified Pab.





Western blot analysis of anti-DHCR24 Antibody (N-term) (Cat.#AP2851a) in mouse liver tissue lysates (35ug/lane). DHCR24 (arrow) was detected using the purified Pab.

# DHCR24 Antibody (N-term) - Background

DHCR24 is a flavin adenine dinucleotide (FAD)-dependent oxidoreductase which catalyzes the reduction of the delta-24 double bond of sterol intermediates during cholesterol biosynthesis. This protein contains a leader sequence that directs it to the endoplasmic reticulum membrane. Missense mutations in this gene have been associated with desmosterolosis. Also, reduced expression of its gene occurs in the temporal cortex of Alzheimer disease patients and overexpression has been observed in adrenal gland cancer cells.

### **DHCR24 Antibody (N-term) - References**

Wang,Y., Mol. Pharmacol. 74 (6), 1716-1721 (2008) Bonaccorsi,L., Lab. Invest. 88 (10), 1049-1056 (2008) Cecchi,C., J. Cell. Mol. Med. 12 (5B), 1990-2002 (2008)

# **DHCR24 Antibody (N-term) - Citations**

 Astrocytic ApoE reprograms neuronal cholesterol metabolism and histone-acetylation-mediated memory