## DHCR 7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antilbody (Pab)
Catalog \# AP11452b

## Specification

## DHCR 7 Antibody (C-term) - Product Information

Application<br>Primary Accession<br>Other Accession<br>Reactivity<br>Host<br>Clonality<br>Isotype<br>Antigen Region

## IF, WB, IHC-P,E

Q9UBM7
NP 001157289.1, NP 001351.2
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG
437-463

## DHCR7 Antibody (C-term) - Additional Information

Gene ID 1717
Other Names
7-dehydrocholesterol reductase, 7-DHC reductase, Putative sterol reductase SR-2, Sterol Delta(7)-reductase, DHCR7, D7SR

Target/Specificity
This DHCR7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 437-463 amino acids from the C-terminal region of human DHCR7.

## Dilution

IF~~1:10~50
WB~~1:2000
IHC-P~~1:50~100
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 $2-8^{\circ} \mathrm{C}$ for up to 2 weeks. For long term storage store at $-20^{\circ} \mathrm{C}$ in small aliquots to prevent freeze-thaw cycles.

## Precautions

DHCR7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## DHCR7 Antibody (C-term) - Protein Information

Name DHCR7

## Synonyms D7SR

Function 7-dehydrocholesterol reductase of the cholesterol biosynthetic pathway reducing the C7-C8 double bond of cholesta-5,7-dien-3beta-ol (7-dehydrocholesterol/7-DHC) and cholesta-5,7,24-trien- 3beta-ol, two intermediates in that pathway.

## Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

## Tissue Location

Widely expressed. Most abundant in adrenal gland, liver, testis, and brain.

## DHCR7 Antibody (C-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

DHCR7 Antibody (C-term) - Images


Immunofluorescent analysis of 4\% paraformaldehyde-fixed, 0. 1\% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling Pdx1 with AP11452B at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at $1 / 200$ dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).


Confocal immunofluorescent analysis of DHCR7 Antibody (C-term)(Cat\#AP11452b) with MCF-7 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).


All lanes: Anti-DHCR7 Antibody (C-term) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Li-7 whole cell lysate Lane 3: U-87MG whole cell lysate Lane 4: mouse testis lysate Lysates/proteins at $20 \mu \mathrm{~g}$ per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5\% NFDM/TBST.

| m.liver |
| :--- |
| 130 |
| 95 |
| 72 |
| $55^{-4}$ |
| 36 |
| 28 |
| 17 |

DHCR7 Antibody (C-term) (Cat. \#AP11452b) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the DHCR7 antibody detected the DHCR7 protein (arrow).


DHCR7 Antibody (C-term) (Cat. \#AP11452b)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DHCR7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.


All Ianes: Anti-DHCR7 Antibody (C-term) at 1:2000 dilution Lane 1: Caco2 whole cell lysate Lane 2: mouse testis lysate Lysates/proteins at $20 \mu \mathrm{~g}$ per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at $1 / 15000$ dilution. Observed band size : 55kDa Blocking/Dilution buffer: 5\% NFDM/TBST.

## DHCR7 Antibody (C-term) - Background

This gene encodes an enzyme that removes the $C(7-8)$ double bond in the B ring of sterols and catalyzes the conversion of 7-dehydrocholesterol to cholesterol. This gene is ubiquitously expressed and its transmembrane protein localizes to the endoplasmic reticulum membrane and nuclear outer membrane. Mutations in this gene cause Smith-Lemli-Opitz syndrome (SLOS); a syndrome that is metabolically characterized by reduced serum cholesterol levels and elevated serum 7-dehydrocholesterol levels and phenotypically characterized by mental retardation, facial dysmorphism, syndactyly of second and third toes, and holoprosencephaly in severe cases to minimal physical abnormalities
and near-normal intelligence in mild cases. Alternative splicing results in multiple transcript variants that encode the same protein.

## DHCR7 Antibody (C-term) - References

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Wang, T.J., et al. Lancet 376(9736):180-188(2010)
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