

**Rabbit Anti-DHCR7 antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50932**

**Specification**

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**Rabbit Anti-DHCR7 antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O9UBM7</a>
Reactivity	Human, Mouse, Rat, Chicken, Bovine, Horse, Dog
Host	Rabbit
Clonality	polyclonal
Calculated MW	H=54; KDa

**Rabbit Anti-DHCR7 antibody - Additional Information**

**Gene ID** 1717

**Other Names**

7-dehydrocholesterol reductase, 7-DHC reductase, Putative sterol reductase SR-2, Sterol Delta(7)-reductase, DHCR7, D7SR

**Dilution**

WB~~1:1000

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Rabbit Anti-DHCR7 antibody - Protein Information**

**Name** DHCR7 ([HGNC:2860](#))

**Synonyms** D7SR

**Function**

Oxidoreductase that catalyzes the last step of the cholesterol synthesis pathway, which transforms cholesta-5,7-dien-3beta-ol (7-dehydrocholesterol, 7-DHC) into cholesterol by reducing the C7-C8 double bond of its sterol core (PubMed: [25637936](http://www.uniprot.org/citations/25637936) target="\_blank">25637936</a>, PubMed: [38297129](http://www.uniprot.org/citations/38297129) target="\_blank">38297129</a>, PubMed: [38297130](http://www.uniprot.org/citations/38297130) target="\_blank">38297130</a>, PubMed: [9465114](http://www.uniprot.org/citations/9465114) target="\_blank">9465114</a>, PubMed: [9634533](http://www.uniprot.org/citations/9634533) target="\_blank">9634533</a>). Can also metabolize cholesta-5,7,24-trien-3beta-ol (7-dehydrodemosterol, 7-DHD) to desmosterol, which is then metabolized by the Delta(24)-sterol

reductase (DHCR24) to cholesterol (By similarity). Modulates ferroptosis (a form of regulated cell death driven by iron-dependent lipid peroxidation) through the metabolic breakdown of the anti-ferroptotic metabolites 7-DHC and 7-DHD which, when accumulated, divert the propagation of peroxy radical-mediated damage from phospholipid components to its sterol core, protecting plasma and mitochondrial membranes from phospholipid autoxidation (PubMed:<a href="http://www.uniprot.org/citations/38297129" target="\_blank">38297129</a>, PubMed:<a href="http://www.uniprot.org/citations/38297130" target="\_blank">38297130</a>).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

#### Tissue Location

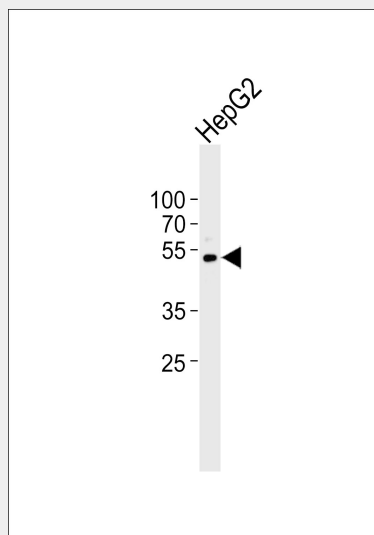
Widely expressed. Most abundant in adrenal gland, liver, testis, and brain.

### Rabbit Anti-DHCR7 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 Cytometry](#)
- [Cell Culture](#)

### Rabbit Anti-DHCR7 antibody - Images



Western blot analysis of lysate from HepG2 cell line, using Rabbit Anti-DHCR7 antibody AP50932. AP50932 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

### Rabbit Anti-DHCR7 antibody - Background

Production of cholesterol by reduction of C7-C8 double bond of 7-dehydrocholesterol (7-DHC).

**Rabbit Anti-DHCR7 antibody - References**

- Waterham H.R.,et al.Am. J. Hum. Genet. 63:329-338(1998).  
Moebius F.F.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:1899-1902(1998).  
Holmer L.,et al.Genomics 54:469-476(1998).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Wassif C.A.,et al.Am. J. Hum. Genet. 63:55-62(1998).