10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DHCR24 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2840a

Product Information

Application	WB, E
Primary Accession	Q15392
Other Accession	Q8VCH6, Q60HC5
Reactivity	Human, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17628
Calculated MW	60101
Antigen Region	57-87

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.

Protein Information

Name	DHCR24
Synonyms	KIAA0018

Function	Catalyzes the reduction of the delta-24 double bond of sterol intermediates during cholesterol biosynthesis (PubMed:11519011, PubMed:21671375, PubMed:22178193, PubMed:25637936). 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:11007892, PubMed:22010141). Also protects against amyloid-beta peptide-induced apoptosis (PubMed:11007892).
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

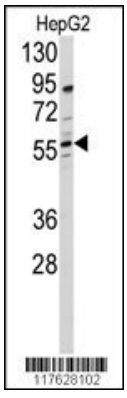
Background

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.

References

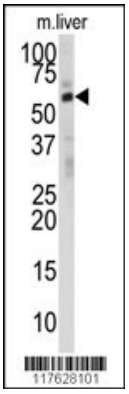
Wang,Y., Mol. Pharmacol. 74 (6), 1716-1721 (2008)
Bonaccorsi,L., Lab. Invest. 88 (10), 1049-1056 (2008)
Cecchi,C., J. Cell. Mol. Med. 12 (5B), 1990-2002 (2008)

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.



Citations

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