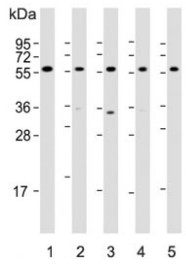
DHCR7 Antibody / 7-dehydrocholesterol reductase (F54352)

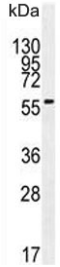
Catalog No.	Formulation	Size
F54352-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54352-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

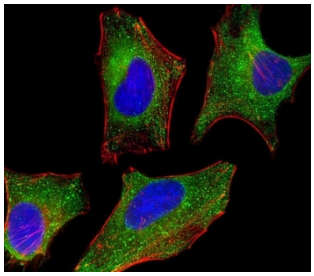
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	Q9UBM7
Localization	Cytoplasmic
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry (FFPE) : 1:25 Immunofluorescence : 1:25
Limitations	This DHCR7 antibody is available for research use only.



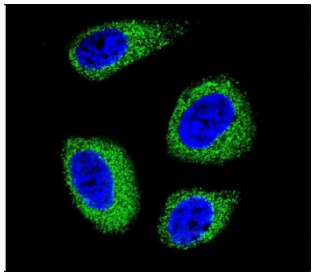
Western blot testing of human 1) HepG2, 2) Li-7, 3) U-87 MG, 4) testis and 5) mouse testis lysate with DHCR7 antibody. Predicted molecular weight ~54 kDa.



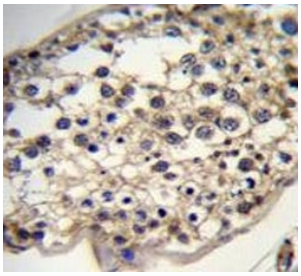
Western blot testing of mouse liver lysate with DHCR7 antibody. Predicted molecular weight ~54 kDa.



Immunofluorescent staining of fixed and permeabilized human HeLa cells with DHCR7 antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).



Immunofluorescent staining of fixed and permeabilized human MCF7 cells with DHCR7 antibody (green) and DAPI nuclear stain (blue).



IHC testing of FFPE human testis tissue with DHCR7 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.

Description

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.

Application Notes

The stated application concentrations are suggested starting points. Titration of the DHCR7 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 437-463 from the human protein was used as the immunogen for the DHCR7 antibody.

Storage

Aliquot the DHCR7 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.