

DHRS2 Polyclonal Antibody

Catalog # AP69531

Specification

DHRS2 Polyclonal Antibody - Product Information

Application WB
Primary Accession Q13268
Reactivity Human

Reactivity
Host
Clonality
Human, Mouse
Rabbit
Polyclonal

DHRS2 Polyclonal Antibody - Additional Information

Gene ID 10202

Other Names

DHRS2; Dehydrogenase/reductase SDR family member 2; Dicarbonyl reductase HEP27; Protein D

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

DHRS2 Polyclonal Antibody - Protein Information

Name DHRS2 (<u>HGNC:18349</u>)

Synonyms SDR25C1

Function

NADPH-dependent oxidoreductase which catalyzes the reduction of dicarbonyl compounds. Displays reductase activity in vitro with 3,4- hexanedione, 2,3-heptanedione and

1-phenyl-1,2-propanedione as substrates (PubMed:16685466). May function as a dicarbonyl reductase in the enzymatic inactivation of reactive carbonyls involved in covalent modification of cellular components (PubMed:16685466). Also displays a minor hydroxysteroid dehydrogenase activity toward bile acids such as ursodeoxycholic acid (UDCA) and isoursodeoxycholic acid (isoUDCA), which makes it unlikely to control hormone levels (PubMed:16685466). Doesn't show any activity in vitro with retinoids and sugars as substrates (PubMed:16685466). Attenuates MDM2-mediated p53/TP53 degradation, leading to p53/TP53 stabilization and increased

transcription activity, resulting in the accumulation of MDM2 and CDKN1A/p21 (PubMed: <a



href="http://www.uniprot.org/citations/20547751" target="_blank">20547751). Reduces proliferation, migration and invasion of cancer cells and well as the production of ROS in cancer (PubMed:29106393).

Cellular Location

Mitochondrion matrix. Nucleus. Note=A minor fraction of the protein is translocated from the mitochondria to the nucleus, after cleavage of the targeting signal

Tissue Location

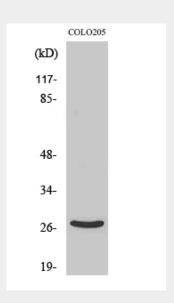
Widely expressed, with highest levels in liver and kidney, followed by heart, spleen, skeletal muscle and placenta. In hemopoietic cells, expressed in dendritic cells, but not in monocytes, macrophages, granulocytes, nor in B and T lymphocytes

DHRS2 Polyclonal 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 Cytomety
- Cell Culture

DHRS2 Polyclonal Antibody - Images



Western Blot analysis of various cells using DHRS2 Polyclonal Antibody

DHRS2 Polyclonal Antibody - Background

Displays NADPH-dependent dicarbonyl reductase activity in vitro with 3,4-Hexanedione, 2,3-Heptanedione and 1-Phenyl-1,2- propanedione as substrates. No reductase activity is displayed in vitro with steroids, retinoids and sugars as substrates. Attenuates MDM2-mediated p53/TP53 degradation, leading to p53/TP53 stabilization and increased transcription activity, resulting in the accumulation of MDM2 and CDKN1A/p21.