

DHRS2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5339B

Product Information

Application WB, IHC-P, E **Primary Accession** Q13268 Other Accession NP 878912.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB26840 Calculated MW 29927 197-225 **Antigen Region**

Additional Information

Gene ID 10202

Other Names Dehydrogenase/reductase SDR family member 2, mitochondrial, 111-,

Dicarbonyl reductase HEP27, Protein D, DHRS2

Target/Specificity This DHRS2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 197-225 amino acids from the

C-terminal region of human DHRS2.

Dilution WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

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 DHRS2 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

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: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

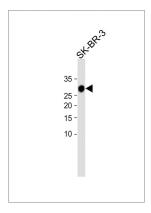
Background

DHRS2 displays NADPH-dependent dicarbonyl reductase activity in vitro with 3,4-Hexanedione, 2,3-Heptanedione and 1-Phenyl-1,2-propanedione as substrates. DHRS2 do not reductase activity is displayed in vitro with steroids, retinoids and sugars as substrates. This protein may inhibit cell replication.

References

Monge, M., et al. Carcinogenesis 30(8):1288-1297(2009) Persson, B., et al. Chem. Biol. Interact. 178 (1-3), 94-98 (2009) Shafqat, N., et al. Cell. Mol. Life Sci. 63(10):1205-1213(2006)

Images



All lanes: Anti-DHRS2 Antibody (C-term) at 1:1000 dilution + SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 30 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.