# DHRS2 (G-12): sc-104878



The Power to Question

## **BACKGROUND**

DHRS2 (dehydrogenase/reductase (SDR family) member 2), also known as SDR25C1 or HEP27, is a 258 amino acid protein that localizes to the nucleus and belongs to the short-chain dehydrogenase/reductase (SDR) family. Functioning as an NADPH-dependent dicarbonyl reductase, DHRS2 is thought to inhibit cell replication by either converting cortisone in cortisol, or by catalyzing the oxidation of androgen and estrogen. The gene encoding DHRS2 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presinilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder  $\alpha 1$ -antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

## **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: DHRS2 (human) mapping to 14q11.2; Dhrs2 (mouse) mapping to 14 C3.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **SOURCE**

DHRS2 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DHRS2 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104878 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

DHRS2 (G-12) is recommended for detection of DHRS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other DHRS family members.

DHRS2 (G-12) is also recommended for detection of DHRS2 in additional species, including equine.

Suitable for use as control antibody for DHRS2 siRNA (h): sc-92153, DHRS2 siRNA (m): sc-143030, DHRS2 shRNA Plasmid (h): sc-92153-SH, DHRS2 shRNA Plasmid (m): sc-143030-SH, DHRS2 shRNA (h) Lentiviral Particles: sc-92153-V and DHRS2 shRNA (m) Lentiviral Particles: sc-143030-V.

Molecular Weight of DHRS2: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat lgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat lgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **DHRS2 (1F10): sc-517054**, our highly recommended monoclonal alternative to DHRS2 (G-12).

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