

# DHRS7C (S-19): sc-246451

## BACKGROUND

DHRS7C (dehydrogenase/reductase SDR family member 7C) is a 312 amino acid secreted protein belonging to the short-chain dehydrogenases/reductases (SDR) family. DHRS7C is a putative oxidoreductase and is encoded by a gene that maps to human chromosome 17. Chromosome 17 comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, p53 and BRCA1. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth are both linked to chromosome 17 mutations. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## REFERENCES

- Hall, J.M., Friedman, L., Guenther, C., Lee, M.K., Weber, J.L., Black, D.M. and King, M.C. 1992. Closing in on a breast cancer gene on chromosome 17q. *Am. J. Hum. Genet.* 50: 1235-1242.
- Evans, S.C. and Lozano, G. 1997. The Li-Fraumeni syndrome: an inherited susceptibility to cancer. *Mol. Med. Today* 3: 390-395.
- Soussi, T., Dehouche, K. and Bérout, C. 2000. p53 website and analysis of p53 gene mutations in human cancer: forging a link between epidemiology and carcinogenesis. *Hum. Mutat.* 15: 105-113.
- Richnau, N. and Aspenström, P. 2001. Rich, a rho GTPase-activating protein domain-containing protein involved in signaling by Cdc42 and Rac1. *J. Biol. Chem.* 276: 35060-35070.
- Minamoto, T., Buschmann, T., Habelhah, H., Matusевич, E., Tahara, H., Boerresen-Dale, A.L., Harris, C., Sidransky, D. and Ronai, Z. 2001. Distinct pattern of p53 phosphorylation in human tumors. *Oncogene* 20: 3341-3347.
- Farrell, C.J. and Plotkin, S.R. 2007. Genetic causes of brain tumors: neurofibromatosis, tuberous sclerosis, von Hippel-Lindau, and other syndromes. *Neurol. Clin.* 25: 925-946
- Rollason, R., Korolchuk, V., Hamilton, C., Jepson, M. and Banting, G. 2009. A CD317/tetherin-RICH2 complex plays a critical role in the organization of the subapical actin cytoskeleton in polarized epithelial cells. *J. Cell Biol.* 184: 721-736.
- Keller, B., Meier, M. and Adamski, J. 2009. Comparison of predicted and experimental subcellular localization of two putative rat steroid dehydrogenases from the short-chain dehydrogenase/reductase protein superfamily. *Mol. Cell. Endocrinol.* 301: 43-46.

## CHROMOSOMAL LOCATION

Genetic locus: DHRS7C (human) mapping to 17p13.1.

## SOURCE

DHRS7C (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DHRS7C of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-246451 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DHRS7C (S-19) is recommended for detection of DHRS7C of 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 DHRS7 or DHRS7B.

DHRS7C (S-19) is also recommended for detection of DHRS7C in additional species, including equine, canine, bovine and porcine.

Molecular Weight of DHRS7C: 35 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-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 IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.