

# SDR16C6 (D-15): sc-87826

## BACKGROUND

SDR16C6 (short chain dehydrogenase/reductase family 16C, member 6, pseudogene) is a 316 amino acid protein that belongs to the short-chain dehydrogenases/reductases (SDR) family. The SDR superfamily now has over 47,000 members, most of which are distantly related, with typically 20–30% residue identity in pairwise comparisons, making it difficult to obtain an overview of this superfamily. The SDR enzymes are present in virtually all genomes investigated, and in humans over 70 SDR genes have been identified. The SDR16C6 gene maps to human chromosome 8q12.1 or mouse chromosome 4 A1. Made up of nearly 146 million bases, human chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder.

## REFERENCES

- Jörnvall, H., et al. 1995. Short-chain dehydrogenases/reductases (SDR). *Biochemistry* 34: 6003-6013.
- Kallberg, Y., et al. 2002. Short-chain dehydrogenase/reductase (SDR) relationships: a large family with eight clusters common to human, animal, and plant genomes. *Protein Sci.* 11: 636-641.
- Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
- Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. *Nature* 439: 331-335.
- Persson, B., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. *Chem. Biol. Interact.* 178: 94-98.
- Church, D.M., et al. 2009. Lineage-specific biology revealed by a finished genome assembly of the mouse. *PLoS Biol.* 7: e1000112.
- Kallberg, Y., et al. 2010. Classification of the short-chain dehydrogenase/reductase superfamily using hidden Markov models. *FEBS J.* 277: 2375-2386.

## CHROMOSOMAL LOCATION

Genetic locus: SDR16C6P (human) mapping to 8q12.1; Sdr16c6 (mouse) mapping to 4 A1.

## SOURCE

SDR16C6 (D-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SDR16C6 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87826 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SDR16C6 (D-15) is recommended for detection of SDR16C6 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).

Suitable for use as control antibody for SDR16C6 siRNA (h): sc-77533, SDR16C6 siRNA (m): sc-108972, SDR16C6 shRNA Plasmid (h): sc-77533-SH, SDR16C6 shRNA Plasmid (m): sc-108972-SH, SDR16C6 shRNA (h) Lentiviral Particles: sc-77533-V and SDR16C6 shRNA (m) Lentiviral Particles: sc-108972-V.

Molecular Weight of SDR16C6: 35 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

## 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.