

# DHRS12 (V-15): sc-84080

## BACKGROUND

DHRS12 (dehydrogenase/reductase (SDR family) member 12), also known as SDR40C1, is a 317 amino acid protein that exists as multiple alternatively spliced isoforms and functions as a putative oxidoreductase. The gene encoding DHRS12 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

## REFERENCES

- Dunham, A., Matthews, L.H., Burton, J., Ashurst, J.L., Howe, K.L., Ashcroft, K.J., Beare, D.M., Burford, D.C., Hunt, S.E., Griffiths-Jones, S., Jones, M.C., Keenan, S.J., Oliver, K, et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- Deng, H., Le, W.D., Xie, W.J. and Jankovic, J. 2006. Examination of the SLITRK1 gene in Caucasian patients with Tourette syndrome. *Acta Neurol. Scand.* 114: 400-402.
- Bugge, M., Collins, A., Hertz, J.M., Eiberg, H., Lundsteen, C., Brandt, C.A., Bak, M., Hansen, C., Delozier, C.D., Lespinasse, J., Tranebjaerg, L., Hahnemann, J.M., Rasmussen, K., Bruun-Petersen, G., Duprez, L., Tommerup, N. and Petersen, M.B. 2007. Non-disjunction of chromosome 13. *Hum. Mol. Genet.* 16: 2004-2010.
- Hassler, M., Singh, S., Yue, W.W., Luczynski, M., Lakbir, R., Sanchez-Sanchez, F., Bader, T., Pearl, L.H. and Mittnacht, S. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. *Mol. Cell* 28: 371-385.
- Hsu, H.F. and Hou, J.W. 2007. Variable expressivity in Patau syndrome is not all related to trisomy 13 mosaicism. *Am. J. Med. Genet. A* 143: 1739-1748.
- Hall, H.E., Chan, E.R., Collins, A., Judis, L., Shirley, S., Surti, U., Hoffner, L., Cockwell, A.E., Jacobs, P.A. and Hassold, T.J. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143: 2242-2248.
- Thorslund, T. and West, S.C. 2007. BRCA2: a universal recombinase regulator. *Oncogene* 26: 7720-7730.
- Persson, B., Kallberg, Y., Bray, J.E., Bruford, E., Dellaporta, S.L., Favia, A.D., Duarte, R.G., Jörnvall, H., Kavanagh, K.L., Kedishvili, N., Kisiela, M., Maser, E., Mindnich, R., Orchard, S., Penning, T.M., Thornton, J.M., Adamski, J. and Oppermann, U. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. *Chem. Biol. Interact.* 178: 94-98.

## CHROMOSOMAL LOCATION

Genetic locus: DHRS12 (human) mapping to 13q14.3.

## RESEARCH USE

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

## SOURCE

DHRS12 (V-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of DHRS12 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-84080 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

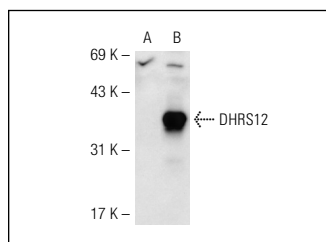
DHRS12 (V-15) is recommended for detection of DHRS12 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DHRS12 (V-15) is also recommended for detection of DHRS12 in additional species, including bovine and avian.

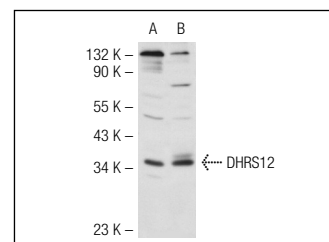
Suitable for use as control antibody for DHRS12 siRNA (h): sc-105294, DHRS12 shRNA Plasmid (h): sc-105294-SH and DHRS12 shRNA (h) Lentiviral Particles: sc-105294-V.

Molecular Weight of DHRS12: 35 kDa.

## DATA



DHRS12 (V-15): sc-84080. Western blot analysis of DHRS12 expression in non-transfected: sc-117752 (A) and human DHRS12 transfected: sc-158442 (B) 293T whole cell lysates.



DHRS12 (V-15): sc-84080. Western blot analysis of DHRS12 expression in Y79 (A) and SW-13 (B) whole cell lysates.

## STORAGE

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

## PROTOCOLS

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