

HDHD2 (C-18): sc-84837

BACKGROUND

HDHD2 (haloacid dehalogenase-like hydrolase domain containing 2) is also known as DKFZp564D1378 and is a 259 amino acid protein that is expressed as 2 isoforms produced by alternative splicing. HDHD2 belongs to the HAD-like hydrolase superfamily, which contains a group of hydrolase enzymes that differ from the α/β hydrolase family based on structure. This family of hydrolase enzymes includes L-2-haloacid dehalogenase, epoxide hydrolases and phosphatases. HDHD2 has two active sites, an L-2-haloacid dehalogenase and a carboxylate group. The L-2-haloacid dehalogenase active site catalyzes the hydrolytic dehalogenation of D- and L-2-haloalkanoic acids, producing L- and D-2-hydroxyalkanoic acids. The gene encoding HDHD2 maps to human chromosome 18. Deletions within chromosome 18q21.1 can lead to deafness, blindness or mild facial dysmorphism. In addition, there are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

1. Cotter, F., Price, C., Zucca, E. and Young, B.D. 1990. Direct sequence analysis of the 14q⁺ and 18q⁻ chromosome junctions in follicular lymphoma. *Blood* 76: 131-135.
2. Cotter, F.E., Price, C., Meerabux, J., Zucca, E. and Young, B.D. 1991. Direct sequence analysis of 14q⁺ and 18q⁻ chromosome junctions at the MBR and MCR revealing clustering within the MBR in follicular lymphoma. *Ann. Oncol.* 2: 93-97.
3. Carstea, E.D., Polymeropoulos, M.H., Parker, C.C., Detera-Wadleigh, S.D., O'Neill, R.R., Patterson, M.C., Goldin, E., Xiao, H., Straub, R.E. and Vanier, M.T. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. *Proc. Natl. Acad. Sci. USA* 90: 2002-2004.
4. Grosso, S., Pucci, L., Di Bartolo, R.M., Gobbi, G., Bartalini, G., Anichini, C., Scarinci, R., Balestri, M., Farnetani, M.A., Cioni, M., Morgese, G. and Balestri, P. 2005. Chromosome 18 aberrations and epilepsy: a review. *Am. J. Med. Genet. A* 134A: 88-94.
5. Semrud-Clikeman, M., Thompson, N.M., Schaub, B.L., Leach, R., Hester, A., Hale, D.E. and Cody, J.D. 2005. Cognitive ability predicts degree of genetic abnormality in participants with 18q deletions. *J. Int. Neuropsychol. Soc.* 11: 584-590.
6. Hepner, F., Myung, J.K., Ulfig, N., Pollak, A. and Lubec, G. 2005. Detection of hypothetical proteins in human fetal perireticular nucleus. *J. Proteome Res.* 4: 2379-2385.

CHROMOSOMAL LOCATION

Genetic locus: HDHD2 (human) mapping to 18q21.1; Hdh2 (mouse) mapping to 18 E3.

SOURCE

HDHD2 (C-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of HDHD2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-84837 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HDHD2 (C-18) is recommended for detection of HDHD2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

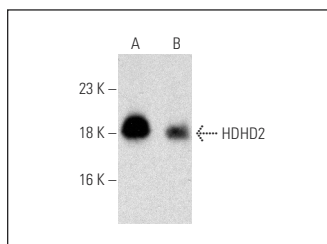
HDHD2 (C-18) is also recommended for detection of HDHD2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HDHD2 siRNA (h): sc-75234, HDHD2 siRNA (m): sc-145914, HDHD2 shRNA Plasmid (h): sc-75234-SH, HDHD2 shRNA Plasmid (m): sc-145914-SH, HDHD2 shRNA (h) Lentiviral Particles: sc-75234-V and HDHD2 shRNA (m) Lentiviral Particles: sc-145914-V.

Molecular Weight of HDHD2 isoforms: 29 kDa.

Positive Controls: mouse brain extract: sc-2253 or mouse thymus extract: sc-2406.

DATA



HDHD2 (C-18): sc-84837. Western blot analysis of HDHD2 expression in mouse brain (A) and mouse thymus (B) tissue extract.

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.



Try **HDHD2 (C-1): sc-514621**, our highly recommended monoclonal alternative to HDHD2 (C-18).