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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



ALDH1B1 (h2): 293T Lysate: sc-174270



The Power to Question

BACKGROUND

Aldehyde dehydrogenases (ALDHs) mediate NADP⁺-dependent oxidation of aldehydes into acids during detoxification of alcohol-derived acetaldehyde, lipid peroxidation and metabolism of corticosteroids, biogenic amines and neurotransmitters. Alcohol drinking habits and cardiovascular disease risk factors may be associated with ALDH gene variants. ALDH1B1 (Aldehyde dehydrogenase family 1 member B1), also known as ALDH5 or ALDHX (Aldehyde dehydrogenase X, mitochondrial), is a 517 amino acid mitochondrial protein that is expressed in the liver, testis and to a lesser extent in brain. ALDH1B1 belongs to the aldehyde dehydrogenase family and may play a major role in ethanol detoxification.

REFERENCES

1. Sherman, D., Dave, V., Hsu, L.C., Peters, T.J. and Yoshida, A. 1993. Diverse polymorphism within a short coding region of the human aldehyde dehydrogenase-5 (ALDH5) gene. *Hum. Genet.* 92: 477-480.
2. Stewart, M.J., Malek, K., Xiao, Q., Dipple, K.M. and Crabb, D.W. 1995. The novel aldehyde dehydrogenase gene, ALDH5, encodes an active aldehyde dehydrogenase enzyme. *Biochem. Biophys. Res. Commun.* 211: 144-151.
3. Vasiliou, V., Bairoch, A., Tipton, K.F. and Neupert, D.W. 1999. Eukaryotic aldehyde dehydrogenase (ALDH) genes: human polymorphisms, and recommended nomenclature based on divergent evolution and chromosomal mapping. *Pharmacogenetics* 9: 421-434.
4. Vasiliou, V. and Pappa, A. 2000. Polymorphisms of human aldehyde dehydrogenases. Consequences for drug metabolism and disease. *Pharmacology* 61: 192-198.
5. Horwitz, J., Ding, L., Vasiliou, V., Cantore, M. and Piatigorsky, J. 2006. Scallop lens ω -crystallin (ALDH1A9): a novel tetrameric aldehyde dehydrogenase. *Biochem. Biophys. Res. Commun.* 348: 1302-1309.
6. Yokoyama, A., Tsutsumi, E., Imazeki, H., Suwa, Y., Nakamura, C. and Yokoyama, T. 2007. Contribution of the alcohol dehydrogenase-1B genotype and oral microorganisms to high salivary acetaldehyde concentrations in Japanese alcoholic men. *Int. J. Cancer* 121: 1047-1054.
7. Luo, P., Wang, A., Payne, K.J., Peng, H., Wang, J.G., Parrish, Y.K., Rogerio, J.W., Triche, T.J., He, Q. and Wu, L. 2007. Intrinsic retinoic acid receptor α -cyclin-dependent kinase-activating kinase signaling involves coordination of the restricted proliferation and granulocytic differentiation of human hematopoietic stem cells. *Stem Cells* 25: 2628-2637.
8. Husemoen, L.L., Fenger, M., Friedrich, N., Tolstrup, J.S., Beenfeldt Fredriksen, S. and Linneberg, A. 2008. The association of ADH and ALDH gene variants with alcohol drinking habits and cardiovascular disease risk factors. *Alcohol. Clin. Exp. Res.* 32: 1984-1991.
9. Bacolod, M.D., Lin, S.M., Johnson, S.P., Bullock, N.S., Colvin, M., Bigner, D.D. and Friedman, H.S. 2008. The gene expression profiles of medulloblastoma cell lines resistant to preactivated cyclophosphamide. *Curr. Cancer Drug Targets* 8: 172-179.

CHROMOSOMAL LOCATION

Genetic locus: ALDH1B1 (human) mapping to 9p13.2.

PRODUCT

ALDH1B1 (h2): 293T Lysate represents a lysate of human ALDH1B1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

ALDH1B1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ALDH1B1 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.