

NUDT18 (h): 293 Lysate: sc-113667

BACKGROUND

NUDT18 (nudix (nucleoside diphosphate linked moiety X)-type motif 18) is a 323 amino acid protein that contains one nudix hydrolase domain and belongs to the nudix hydrolase family. Using magnesium or manganese as cofactors, NUDT18 is thought to mediate the hydrolysis of select nucleoside diphosphate derivatives. Multiple isoforms of NUDT18 exist due to alternative splicing events. The gene encoding NUDT18 maps to human chromosome 8, which encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
2. Kashino, G., Kodama, S., Suzuki, K., Oshimura, M. and Watanabe, M. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
3. Selicorni, A., Gueneri, S., Ratti, A. and Pizzuti, A. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
4. Adam, P.J., Boyd, R., Tyson, K.L., Fletcher, G.C., Stamps, A., Hudson, L., Poyser, H.R., Redpath, N., Griffiths, M., Steers, G., Harris, A.L., Patel, S., Berry, J., Loader, J.A., Townsend, R.R., Daviet, L., Legrain, P., Parekh, R. and Terrett, J.A. 2003. Comprehensive proteomic analysis of breast cancer cell membranes reveals unique proteins with potential roles in clinical cancer. *J. Biol. Chem.* 278: 6482-6489.
5. Huang, X.P., Rong, T.H., Wang, J.Y., Tang, Y.Q., Li, B.J., Xu, D.R., Zhao, M.Q., Zhang, L.J., Fang, Y., Su, X.D. and Liang, Q.W. 2006. Negative implication of c-Myc as an amplification target in esophageal cancer. *Cancer Genet. Cytogenet.* 165: 20-24.
6. van Duin, M., van Marion, R., Vissers, K.J., Hop, W.C., Dinjens, W.N., Tilanus, H.W., Siersema, P.D. and van Dekken, H. 2007. High-resolution array comparative genomic hybridization of chromosome 8q: evaluation of putative progression markers for gastroesophageal junction adenocarcinomas. *Cytogenet. Genome Res.* 118: 130-137.
7. Kamath, A., Tara, H., Xiang, B., Bajaj, R., He, W. and Li, P. 2008. Double-minute Myc amplification and deletion of MTAP, CDKN2A, CDKN2B, and ELAVL2 in an acute myeloid leukemia characterized by oligonucleotide-array comparative genomic hybridization. *Cancer Genet. Cytogenet.* 183: 117-120.

CHROMOSOMAL LOCATION

Genetic locus: NUDT18 (human) mapping to 8p21.3.

PRODUCT

NUDT18 (h): 293 Lysate represents a lysate of human NUDT18 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NUDT18 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive NUDT18 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 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.