

## 5 Literatur

- Akimoto, Y. et al., 2003. Localization of the O-GlcNAc transferase and O-GlcNAc-modified proteins in rat cerebellar cortex. *Brain Res*, 966(2): 194-205.
- Almas, B., Le Bourdelles, B., Flatmark, T., Mallet, J. and Haavik, J., 1992. Regulation of recombinant human tyrosine hydroxylase isozymes by catecholamine binding and phosphorylation. Structure/activity studies and mechanistic implications. *Eur J Biochem*, 209(1): 249-55.
- Angata, K. et al., 2007. Polysialic Acid-Directed Migration and Differentiation of Neural Precursors is Essential for Mouse Brain Development. *Mol Cell Biol*. [Advanced Epub]
- Ashwell, G. and Harford, J., 1982. Carbohydrate-specific receptors of the liver. *Annu Rev Biochem*, 51: 531-54.
- Baizer, L. and Weiner, N., 1985. Regulation of dopamine release from PC12 pheochromocytoma cell cultures during stimulation with elevated potassium or carbachol. *J Neurochem*, 44(2): 495-501.
- Berg, E.L., Magnani, J., Warnock, R.A., Robinson, M.K. and Butcher, E.C., 1992. Comparison of L-selectin and E-selectin ligand specificities: the L-selectin can bind the E-selectin ligands sialyl Le(x) and sialyl Le(a). *Biochem Biophys Res Commun*, 184(2): 1048-55.
- Blix, G., Lindberg, E., Odin, L. and Werner, I., 1955. Sialic acids. *Nature*, 175(4451): 340-1.
- Bonfanti, L., 2006. PSA-NCAM in mammalian structural plasticity and neurogenesis. *Prog Neurobiol*, 80(3): 129-64.
- Brennan, W.A., Jr., 1988. Developmental aspects of the rat brain insulin receptor: loss of sialic acid and fluctuation in number characterize fetal development. *Endocrinology*, 122(6): 2364-70.
- Brocco, M.A. and Frasch, A.C., 2006. Interfering polysialyltransferase ST8SiaII/STX mRNA inhibits neurite growth during early hippocampal development. *FEBS Letters*

- Lett, 580(19): 4723-6.
- Buttner, B. et al., 2002. Biochemical engineering of cell surface sialic acids stimulates axonal growth. *J Neurosci*, 22(20): 8869-75.
- Cheng, X. and Hart, G.W., 2001. Alternative O-glycosylation/O-phosphorylation of serine-16 in murine estrogen receptor beta: post-translational regulation of turnover and transactivation activity. *J Biol Chem*, 276(13): 10570-5.
- Chou, T.Y., Hart, G.W. and Dang, C.V., 1995. c-Myc is glycosylated at threonine 58, a known phosphorylation site and a mutational hot spot in lymphomas. *J Biol Chem*, 270(32): 18961-5.
- Chrostek, L. et al., 2007. Serum free sialic acid as a marker of alcohol abuse. *Alcohol Clin Exp Res*, 31(6): 996-1001.
- Comer, F.I. and Hart, G.W., 1999. O-GlcNAc and the control of gene expression. *Biochim Biophys Acta*, 1473(1): 161-71.
- Comer, F.I. and Hart, G.W., 2000. O-Glycosylation of nuclear and cytosolic proteins. Dynamic interplay between O-GlcNAc and O-phosphate. *J Biol Chem*, 275(38): 29179-82.
- Comer, F.I. and Hart, G.W., 2001. Reciprocity between O-GlcNAc and O-phosphate on the carboxyl terminal domain of RNA polymerase II. *Biochemistry*, 40(26): 7845-52.
- Corfield, 1982. "Occurrence of sialic acids". Springer, New York, pp. 5-50.
- Cunningham, B.A. et al., 1987. Neural cell adhesion molecule: structure, immunoglobulin-like domains, cell surface modulation, and alternative RNA splicing. *Science*, 236(4803): 799-806.
- Dahmus, M.E., 1995. Phosphorylation of the C-terminal domain of RNA polymerase II. *Biochim Biophys Acta*, 1261(2): 171-82.
- Dairaku, K. and Spiro, R.G., 1997. Phylogenetic survey of endomannosidase indicates late evolutionary appearance of this N-linked oligosaccharide processing enzyme. *Glycobiology*, 7(4): 579-86.
- Dong, D.L., Xu, Z.S., Hart, G.W. and Cleveland, D.W., 1996. Cytoplasmic O-GlcNAc

- modification of the head domain and the KSP repeat motif of the neurofilament protein neurofilament-H. *J Biol Chem*, 271(34): 20845-52.
- Dunkley, P.R., Bobrovskaya, L., Graham, M.E., von Nagy-Felsobuki, E.I. and Dickson, P.W., 2004. Tyrosine hydroxylase phosphorylation: regulation and consequences. *J Neurochem*, 91(5): 1025-43.
- Dunkley, P.R., Bobrovskaya, L., Graham, M.E., von Nagy-Felsobuki, E.I. and Dickson, P.W., 2004. Tyrosine hydroxylase phosphorylation: regulation and consequences. *J Neurochem*, 91(5): 1025-43.
- Eckhardt, M., Muhlenhoff, M., Bethe, A. and Gerardy-Schahn, R., 1996. Expression cloning of the Golgi CMP-sialic acid transporter. *Proc Natl Acad Sci U S A*, 93(15): 7572-6.
- Edelman, G.M., 1985. Cell adhesion molecule expression and the regulation of morphogenesis. *Cold Spring Harb Symp Quant Biol*, 50: 877-89.
- Effertz, K., Hinderlich, S. and Reutter, W., 1999. Selective loss of either the epimerase or kinase activity of UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase due to site-directed mutagenesis based on sequence alignments. *J Biol Chem*, 274(40): 28771-8.
- El Maarouf, A., Kolesnikov, Y., Pasternak, G. and Rutishauser, U., 2005. Polysialic acid-induced plasticity reduces neuropathic insult to the central nervous system. *Proc Natl Acad Sci U S A*, 102(32): 11516-20.
- El Maarouf, A., Petridis, A.K. and Rutishauser, U., 2006. Use of polysialic acid in repair of the central nervous system. *Proc Natl Acad Sci U S A*, 103(45): 16989-94.
- Enns, G.M. et al., 2001. Clinical course and biochemistry of sialuria. *J Inherit Metab Dis*, 24(3): 328-36.
- Faillard, H., 1989. The early history of sialic acids. *Trends Biochem Sci*, 14(6): 237-41.
- Ferreira, H. et al., 1999. Sialuria in a Portuguese girl: clinical, biochemical, and molecular characteristics. *Mol Genet Metab*, 67(2): 131-7.
- Finne, J., Finne, U., Deagostini-Bazin, H. and Goridis, C., 1983. Occurrence of alpha 2-

- 8 linked polysialosyl units in a neural cell adhesion molecule. *Biochem Biophys Res Commun*, 112(2): 482-7.
- Fukuta, K., Yokomatsu, T., Abe, R., Asanagi, M. and Makino, T., 2000. Genetic engineering of CHO cells producing human interferon-gamma by transfection of sialyltransferases. *Glycoconj J*, 17(12): 895-904.
- Galuska, S.P. et al., 2006. Polysialic acid profiles of mice expressing variant allelic combinations of the polysialyltransferases ST8SiaII and ST8SiaIV. *J Biol Chem*, 281(42): 31605-15.
- Gascon, E., Vutskits, L. and Kiss, J.Z., 2007. Polysialic acid-neural cell adhesion molecule in brain plasticity: From synapses to integration of new neurons. *Brain Res Rev*.
- Goridis, C. et al., 1983. Neural surface antigens during nervous system development. *Cold Spring Harb Symp Quant Biol*, 48 Pt 2: 527-37.
- Gu, X. and Wang, D.I., 1998. Improvement of interferon-gamma sialylation in Chinese hamster ovary cell culture by feeding of N-acetylmannosamine. *Biotechnol Bioeng*, 58(6): 642-8.
- Hammond, C., Braakman, I. and Helenius, A., 1994. Role of N-linked oligosaccharide recognition, glucose trimming, and calnexin in glycoprotein folding and quality control. *Proc Natl Acad Sci U S A*, 91(3): 913-7.
- Hanover, J.A., 1992. The nuclear pore: at the crossroads. *Faseb J*, 6(6): 2288-95.
- Harduin-Lepers, A., Mollicone, R., Delannoy, P. and Oriol, R., 2005. The animal sialyltransferases and sialyltransferase-related genes: a phylogenetic approach. *Glycobiology*, 15(8): 805-17.
- Hart, G.W., 1997. Dynamic O-linked glycosylation of nuclear and cytoskeletal proteins. *Annu Rev Biochem*, 66: 315-35.
- Hart, G.W., Haltiwanger, R.S., Holt, G.D. and Kelly, W.G., 1989. Glycosylation in the nucleus and cytoplasm. *Annu Rev Biochem*, 58: 841-74.
- Helenius, A., 1994. How N-linked oligosaccharides affect glycoprotein folding in the endoplasmic reticulum. *Mol Biol Cell*, 5(3): 253-65.

- Higuchi, M. et al., 1992. Role of sugar chains in the expression of the biological activity of human erythropoietin. *J Biol Chem*, 267(11): 7703-9.
- Hildebrandt, H., Becker, C., Murau, M., Gerardy-Schahn, R. and Rahmann, H., 1998. Heterogeneous expression of the polysialyltransferases ST8Sia II and ST8Sia IV during postnatal rat brain development. *J Neurochem*, 71(6): 2339-48.
- Hinderlich, S., Stasche, R., Zeitler, R. and Reutter, W., 1997. A bifunctional enzyme catalyzes the first two steps in N-acetylneurameric acid biosynthesis of rat liver. Purification and characterization of UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase. *J Biol Chem*, 272(39): 24313-8.
- Horstkorte, R., Schachner, M., Magyar, J.P., Vorherr, T. and Schmitz, B., 1993. The fourth immunoglobulin-like domain of NCAM contains a carbohydrate recognition domain for oligomannosidic glycans implicated in association with L1 and neurite outgrowth. *J Cell Biol*, 121(6): 1409-21.
- Huang, C.M., Tsay, K.E. and Kao, L.S., 1996. Role of Ca<sup>2+</sup> in differentiation mediated by nerve growth factor and dibutyryl cyclic AMP in PC12 cells. *J Neurochem*, 67(2): 530-9.
- Hubert, J., Seve, A.P., Facy, P. and Monsigny, M., 1989. Are nuclear lectins and nuclear glycoproteins involved in the modulation of nuclear functions? *Cell Differ Dev*, 27(2): 69-81.
- Jayant, S. et al., 2007. Targeted Sialic Acid-Doxorubicin Prodrugs for Intracellular Delivery and Cancer Treatment. *Pharm Res*.
- Jenkins, N. and Curling, E.M., 1994. Glycosylation of recombinant proteins: problems and prospects. *Enzyme Microb Technol*, 16(5): 354-64.
- Jourdian, G.W., Swanson, A.L., Watson, D. and Roseman, S., 1964. Isolation of Sialic Acid 9-Phosphatase from Human Erythrocytes. *J Biol Chem*, 239: PC2714-6.
- Kadonaga, J.T., 1998. Eukaryotic transcription: an interlaced network of transcription factors and chromatin-modifying machines. *Cell*, 92(3): 307-13.
- Kamemura, K., Hayes, B.K., Comer, F.I. and Hart, G.W., 2002. Dynamic interplay between O-glycosylation and O-phosphorylation of nucleocytoplasmic proteins:

- alternative glycosylation/phosphorylation of THR-58, a known mutational hot spot of c-Myc in lymphomas, is regulated by mitogens. *J Biol Chem*, 277(21): 19229-35.
- Kean, E.L., 1969. Sialic acid activating enzyme in ocular tissue. *Exp Eye Res*, 8(1): 44-54.
- Kean, E.L., 1970. Nuclear cytidine 5'-monophosphosialic acid synthetase. *J Biol Chem*, 245(9): 2301-8.
- Kelly, W.G., Dahmus, M.E. and Hart, G.W., 1993. RNA polymerase II is a glycoprotein. Modification of the COOH-terminal domain by O-GlcNAc. *J Biol Chem*, 268(14): 10416-24.
- Kelly, W.G. and Hart, G.W., 1989. Glycosylation of chromosomal proteins: localization of O-linked N-acetylglucosamine in *Drosophila* chromatin. *Cell*, 57(2): 243-51.
- Kelm, S. and Schauer, R., 1997. Sialic acids in molecular and cellular interactions. *Int Rev Cytol*, 175: 137-240.
- Keppler, O.T., Horstkorte, R., Pawlita, M., Schmidt, C. and Reutter, W., 2001. Biochemical engineering of the N-acyl side chain of sialic acid: biological implications. *Glycobiology*, 11(2): 11R-18R.
- Keppler, O.T. et al., 1995. Biosynthetic modulation of sialic acid-dependent virus-receptor interactions of two primate polyoma viruses. *J Biol Chem*, 270(3): 1308-14.
- Kitagawa, H. and Paulson, J.C., 1994. Differential expression of five sialyltransferase genes in human tissues. *J Biol Chem*, 269(27): 17872-8.
- Kitagawa, R., Miyachi, S., Hanawa, H., Takada, M. and Shimada, T., 2007. Differential characteristics of HIV-based versus SIV-based lentiviral vector systems: Gene delivery to neurons and axonal transport of expressed gene. *Neurosci Res*, 57(4): 550-8.
- Kojima, N. et al., 1996. Biosynthesis and expression of polysialic acid on the neural cell adhesion molecule is predominantly directed by ST8Sia II/STX during in vitro neuronal differentiation. *J Biol Chem*, 271(36): 22058-62.

- Kornfeld, R. and Kornfeld, S., 1985. Assembly of asparagine-linked oligosaccharides. *Annu Rev Biochem*, 54: 631-64.
- Kornfeld, S., Kornfeld, R., Neufeld, E.F. and O'Brien, P.J., 1964. The Feedback Control of Sugar Nucleotide Biosynthesis in Liver. *Proc Natl Acad Sci U S A*, 52: 371-9.
- Kreppel, L.K., Blomberg, M.A. and Hart, G.W., 1997. Dynamic glycosylation of nuclear and cytosolic proteins. Cloning and characterization of a unique O-GlcNAc transferase with multiple tetratricopeptide repeats. *J Biol Chem*, 272(14): 9308-15.
- Kurtul, N. and Arikan, B.C., 2006. The effects of pesticide exposure on serum total sialic acid levels. *Acta Medica (Hradec Kralove)*, 49(2): 97-100.
- Kurtul, N., Cil, M.Y. and Pacaci, S.D., 2005. Serum total sialic acid levels in smokers and users of smokeless tobacco in form of oral powder (Maras powder). *J Biomed Sci*, 12(3): 559-63.
- Lantuejoul, S., Moro, D., Michalides, R.J., Brambilla, C. and Brambilla, E., 1998. Neural cell adhesion molecules (NCAM) and NCAM-PSA expression in neuroendocrine lung tumors. *Am J Surg Pathol*, 22(10): 1267-76.
- Larkin, M. et al., 1992. Spectrum of sialylated and nonsialylated fuco-oligosaccharides bound by the endothelial-leukocyte adhesion molecule E-selectin. Dependence of the carbohydrate binding activity on E-selectin density. *J Biol Chem*, 267(19): 13661-8.
- Leroy, J.G. et al., 2001. Dominant inheritance of sialuria, an inborn error of feedback inhibition. *Am J Hum Genet*, 68(6): 1419-27.
- Lubas, W.A., Frank, D.W., Krause, M. and Hanover, J.A., 1997. O-Linked GlcNAc transferase is a conserved nucleocytoplasmic protein containing tetratricopeptide repeats. *J Biol Chem*, 272(14): 9316-24.
- Matzuk, M.M. and Boime, I., 1988. The role of the asparagine-linked oligosaccharides of the alpha subunit in the secretion and assembly of human chorionic gonadotrophin. *J Cell Biol*, 106(4): 1049-59.
- Matzuk, M.M., Kornmeier, C.M., Whitfield, G.K., Kourides, I.A. and Boime, I., 1988.

- The glycoprotein alpha-subunit is critical for secretion and stability of the human thyrotropin beta-subunit. *Mol Endocrinol*, 2(2): 95-100.
- Mellquist, J.L., Kasturi, L., Spitalnik, S.L. and Shakin-Eshleman, S.H., 1998. The amino acid following an asn-X-Ser/Thr sequon is an important determinant of N-linked core glycosylation efficiency. *Biochemistry*, 37(19): 6833-7.
- Misaizu, T. et al., 1995. Role of antennary structure of N-linked sugar chains in renal handling of recombinant human erythropoietin. *Blood*, 86(11): 4097-104.
- Nakata, D. and Troy, F.A., 2nd, 2005. Degree of polymerization (DP) of polysialic acid (polySia) on neural cell adhesion molecules (N-CAMS): development and application of a new strategy to accurately determine the DP of polySia chains on N-CAMS. *J Biol Chem*, 280(46): 38305-16.
- Rademacher, T.W., Parekh, R.B. and Dwek, R.A., 1988. Glycobiology. *Annu Rev Biochem*, 57: 785-838.
- Rizzolo, L.J. and Kornfeld, R., 1988. Post-translational protein modification in the endoplasmic reticulum. Demonstration of fatty acylase and deoxymannojirimycin-sensitive alpha-mannosidase activities. *J Biol Chem*, 263(19): 9520-5.
- Roesler, J., Srivatsan, E., Moatamed, F., Peters, J. and Livingston, E.H., 1997. Tumor suppressor activity of neural cell adhesion molecule in colon carcinoma. *Am J Surg*, 174(3): 251-7.
- Roth, J., Blaha, I., Bitter-Suermann, D. and Heitz, P.U., 1988. Blastemal cells of nephroblastomatosis complex share an onco-developmental antigen with embryonic kidney and Wilms' tumor. An immunohistochemical study on polysialic acid distribution. *Am J Pathol*, 133(3): 596-608.
- Roth, J., Kempf, A., Reuter, G., Schauer, R. and Gehring, W.J., 1992. Occurrence of sialic acids in *Drosophila melanogaster*. *Science*, 256(5057): 673-5.
- Rutishauser, U., Acheson, A., Hall, A.K., Mann, D.M. and Sunshine, J., 1988. The neural cell adhesion molecule (NCAM) as a regulator of cell-cell interactions. *Science*, 240(4848): 53-7.

- Santell, L. et al., 1999. Aberrant metabolic sialylation of recombinant proteins expressed in Chinese hamster ovary cells in high productivity cultures. *Biochem Biophys Res Commun*, 258(1): 132-7.
- Schauer, R., 1982. Chemistry, metabolism, and biological functions of sialic acids. *Adv Carbohydr Chem Biochem*, 40: 131-234.
- Scheidegger, E.P., Sternberg, L.R., Roth, J. and Lowe, J.B., 1995. A human STX cDNA confers polysialic acid expression in mammalian cells. *J Biol Chem*, 270(39): 22685-8.
- Sebzda, T. et al., 2006. Total and lipid-bound plasma sialic acid as diagnostic markers in colorectal cancer patients: correlation with cathepsin B expression in progression to Dukes stage. *J Exp Ther Oncol*, 5(3): 223-9.
- Senut, M.C. et al., 1995. Regional differences in responsiveness of adult CNS axons to grafts of cells expressing human neurotrophin 3. *Exp Neurol*, 135(1): 36-55.
- Seppala, R., Lehto, V.P. and Gahl, W.A., 1999. Mutations in the human UDP-N-acetylglucosamine 2-epimerase gene define the disease sialuria and the allosteric site of the enzyme. *Am J Hum Genet*, 64(6): 1563-9.
- Seppala, R. et al., 1991. Sialic acid metabolism in sialuria fibroblasts. *J Biol Chem*, 266(12): 7456-61.
- Shannon, K.M., 2007. Dopamine: so "last century". *Neurology*, 69(4): 329-30.
- Shaw, P., Freeman, J., Bovey, R. and Iggo, R., 1996. Regulation of specific DNA binding by p53: evidence for a role for O-glycosylation and charged residues at the carboxy-terminus. *Oncogene*, 12(4): 921-30.
- Spivak, J.L. and Hogans, B.B., 1989. The in vivo metabolism of recombinant human erythropoietin in the rat. *Blood*, 73(1): 90-9.
- Stasche, R. et al., 1997. A bifunctional enzyme catalyzes the first two steps in N-acetylneuraminate acid biosynthesis of rat liver. Molecular cloning and functional expression of UDP-N-acetyl-glucosamine 2-epimerase/N-acetylmannosamine kinase. *J Biol Chem*, 272(39): 24319-24.
- Suzuki, O., Nozawa, Y. and Abe, M., 2006. The regulatory roles of cell surface

- sialylation and N-glycans in human B cell lymphoma cell adhesion to galectin-1. *Int J Oncol*, 28(1): 155-60.
- Takeuchi, M. et al., 1989. Relationship between sugar chain structure and biological activity of recombinant human erythropoietin produced in Chinese hamster ovary cells. *Proc Natl Acad Sci U S A*, 86(20): 7819-22.
- Tezel, E., Kawase, Y., Takeda, S., Oshima, K. and Nakao, A., 2001. Expression of neural cell adhesion molecule in pancreatic cancer. *Pancreas*, 22(2): 122-5.
- Tiralongo, J. et al., 2007. The rainbow trout CMP-sialic acid synthetase utilises a nuclear localization signal different from that identified in the mouse enzyme. *Glycobiology*.
- Torres, C.R. and Hart, G.W., 1984. Topography and polypeptide distribution of terminal N-acetylglucosamine residues on the surfaces of intact lymphocytes. Evidence for O-linked GlcNAc. *J Biol Chem*, 259(5): 3308-17.
- Troy, F.A., 2nd, 1992. Polysialylation: from bacteria to brains. *Glycobiology*, 2(1): 5-23.
- Uhrig, R.K., Picard, M.A., Beyreuther, K. and Wiessler, M., 2000. Synthesis of antioxidative and anti-inflammatory drugs glucoconjugates. *Carbohydr Res*, 325(1): 72-80.
- Varki, A., 1992. Diversity in the sialic acids. *Glycobiology*, 2(1): 25-40.
- Varki, A., 1993. Biological roles of oligosaccharides: all of the theories are correct. *Glycobiology*, 3(2): 97-130.
- Varki, A., 1998. Factors controlling the glycosylation potential of the Golgi apparatus. *Trends Cell Biol*, 8(1): 34-40.
- Varki, A. and Freeze, H.H., 1994. The major glycosylation pathways of mammalian membranes. A summary. *Subcell Biochem*, 22: 71-100.
- Walz, G., Aruffo, A., Kolanus, W., Bevilacqua, M. and Seed, B., 1990. Recognition by ELAM-1 of the sialyl-Lex determinant on myeloid and tumor cells. *Science*, 250(4984): 1132-5.
- Wang, X.Y., Lin, S.Q., Li, J.W., Kemmner, W. and Ding, Y.Q., 2006. [Effect of cell

- surface sialic acid and their linkages on adhesion of mammary carcinoma cells]. Nan Fang Yi Ke Da Xue Xue Bao, 26(6): 742-6.
- Warren, L. and Felsenfeld, H., 1961. The biosynthesis of N-acetylneuraminic acid. Biochem Biophys Res Commun, 4: 232-5.
- Warren, L. and Felsenfeld, H., 1962. The biosynthesis of sialic acids. J Biol Chem, 237: 1421-31.
- Weinhold, B. et al., 2005. Genetic ablation of polysialic acid causes severe neurodevelopmental defects rescued by deletion of the neural cell adhesion molecule. J Biol Chem, 280(52): 42971-7.
- Weiss, P., Tietze, F., Gahl, W.A., Seppala, R. and Ashwell, G., 1989. Identification of the metabolic defect in sialuria. J Biol Chem, 264(30): 17635-6.
- Wells, L., Kreppel, L.K., Comer, F.I., Wadzinski, B.E. and Hart, G.W., 2004. O-GlcNAc transferase is in a functional complex with protein phosphatase 1 catalytic subunits. J Biol Chem, 279(37): 38466-70.
- Williams, D.B., 1995. Calnexin leads glycoproteins into the fold. Glycoconj J, 12(3): iii-iv.
- Wong, N.S., Yap, M.G. and Wang, D.I., 2006. Enhancing recombinant glycoprotein sialylation through CMP-sialic acid transporter over expression in Chinese hamster ovary cells. Biotechnol Bioeng, 93(5): 1005-16.
- Yoshida, Y., Kojima, N. and Tsuji, S., 1995. Molecular cloning and characterization of a third type of N-glycan alpha 2,8-sialyltransferase from mouse lung. J Biochem (Tokyo), 118(3): 658-64.
- Zachara, N.E. and Hart, G.W., 2006. Cell signaling, the essential role of O-GlcNAc! Biochim Biophys Acta, 1761(5-6): 599-617.

