

Dr. Schwalbe

Selected Publications:

1. Hall M.K., Reutter W., Lindhurst T., and Schwalbe R.A. (2011) Biochemical engineering of the N-acyl side chain of sialic acids alters the kinetics of a glycosylated potassium channel Kv3.1. *FEBS Letters* 585, 3322-3327.
2. Hall MK, Cartwright TA, Fleming CM, Schwalbe RA (2011) Importance of Glycosylation on Function of a Potassium Channel in Neuroblastoma Cells. *PLoS ONE* 6: e19317.
3. Cartwright TA and Schwalbe RA. (2009) Atypical sialylated N-glycan structures are attached to neuronal voltage gated potassium channels. *Bioscience Reports*. 29:301-313.
4. Schwalbe RA, Corey MJ and Cartwright TA. (2008) *Novel Kv3 glycoforms differentially expressed in adult mammalian brain contain sialylated N-glycans*. *Biochem Cell Biol* 86, 21-30.
5. Cartwright, T.A., Corey, M.J., and Schwalbe, R.A. (2007) *Complex oligosaccharides are N-linked to Kv3 voltage-gated K⁺ channels in rat brain*. *Biochimica et Biophysica Acta* 1770, 666-671.
6. Brooks, N.L., Corey, M.J., and Schwalbe, R.A. (2006) *Characterization of N-Glycosylation Consensus sequences in the Kv3.1 Channel*. *FEBS J*, 273:3287-3300.
7. Xia, S.L., Wang, L., Cash, M.N., Teng, X., Schwalbe, R.A., and Wingo, C.S. (2004). *Extracellular ATP-Induced Calcium Signaling in IMCD3 Cells Requires Both P2X and P2Y Purinoceptors*. *Am J Physiol Renal Physiol*. 287, F204-214.
8. Schwalbe, R.A., Wingo, C.S., and Xia, S.L. (2002). *N-Glycosylation Substitution Mutants Favor Short-Lived Wild-Type Kir2.1 Pore Conformations*. *Biochemistry* 41, 12457-12466.
9. Schwalbe, R.A., Rudin, A., Xia, S.L., and Wingo, C.S. (2002). *Site-directed Glycosylation Tagging of Functional Kir2.1 Reveals that the Putative Pore-Forming Segment is Extracellular*. *J. Biol. Chem.* 277, 24382-24389.
10. Schwalbe, R.A., Bianchi, L., Accili, E., and Brown, A.M. (1998). *Functional Consequences of ROMK Mutants Linked to Antenatal Bartter's Syndrome and Implications for Treatment*. *Hum. Mol. Genetics*. 7, 975-980.
11. Schwalbe, R.A., Bianchi, L., and Brown, A.M. (1997). *Mapping the Kidney Potassium Channel ROMK1: Glycosylation of the Pore Signature Sequence and the C-terminus*. *J. Biol. Chem.* 272, 25217-25223.
12. Schwalbe, R.A., Wang, Z., Bianchi, L., and Brown, A.M. (1996). *Novel N-Glycosylation ROMK1 Mutants Reveals the Putative Pore-Forming Segment H5 as Exoplasmic*. *J. Biol. Chem.* 271, 24201-24206.
13. McDonald, J.F., Shah, A.M., Schwalbe, R.A., Kisiel, W., Dahlbäck B., and Nelsestuen, G.L. (1997). *Comparison of Naturally Occurring Vitamin K-Dependent Proteins: Correlation of Amino Acid Sequences and Membrane Binding Properties Suggests a Membrane Contact Site*. *Biochemistry* 36, 5120-5127.
14. Schwalbe, R. A., Coe, J. E., and Nelsestuen, G. L. (1995). *Association of Rat C-reactive Protein and Other Pentraxins with Rat Lipoproteins Containing Apolipoproteins-E and -A1*. *Biochemistry* 34, 10432-10439.
15. Schwalbe, R.A., Wang, Z., Wible, B., and Brown, A.M. (1995). *Potassium Channel Structure and Function Reported by a Single Glycosylation Sequon*. *J. Biol. Chem.* 270, 15336-15340.
16. Schwalbe, R. A., Dahlbäck, B., Coe, J. E., and Nelsestuen, G. L. (1992). *Pentraxin Family of Proteins that Interact Specifically with Phosphorylcholine and/or Phosphorylethanolamine*. *Biochemistry* 31, 4907-4915.
17. Schwalbe, R. A., Dahlbäck, B., and Nelsestuen, G. L. (1991). *Heparin Influence on the Complex of Serum Amyloid P Component and Complement C4b-Binding Protein*. *J. Biol. Chem.* 266, 12896-12901.
18. Schwalbe, R. A., Dahlbäck, B., and Nelsestuen, G. L. (1990). *Independent Association of Serum Amyloid P Component, Protein S and Complement C4b with C4b-Binding Protein and Subsequent Association of the Complex with Membranes*. *J. Biol. Chem.* 265, 21749-21762.
19. Schwalbe, R. A., Dahlbäck, B., Hillarp, A., and Nelsestuen, G. L. (1990). *Assembly of Protein S and C4b-Binding Protein on Membranes*. *J. Biol. Chem.* 265, 16074-16081.
20. Schwalbe, R. A., Ryan, J., Stern, D. M., Kisiel, W., Dahlbäck, B., and Nelsestuen, G. L. (1989). *Protein Structural Requirements and Properties of Membrane Binding by γ -Carboxyglutamic Acid-containing Plasma Proteins and Peptides*. *J. Biol. Chem.* 264, 20288-20296