



## Publikationen Priv. Doz. Dr. rer. nat. Heribert Appelhans

### Originalarbeiten

#### 2010

- ▶ **Antibody to aquaporin 4 in the diagnosis of neuromyelitis optica**  
Paul F, Jarius S, Aktas O, Blüthner M, Bauer O, [Appelhans H](#), Franciotta D, Bergamaschi R, Littleton E, Palace J, Seelig HP, Hohlfeld R, Vincent A, Zipp F  
PLoS Med: 4(4), e133 (2007)
- ▶ **Combinatorial RNAi for quantitative protein network analysis**  
Sahin O, Löbke C, Korf U, [Appelhans H](#), Sültmann H, Poustka A, Wiemann S, Arlt D  
Proc Natl Acad Sci: 104(16), 6579-6584 (2007)

#### 2000

- ▶ **Expression and functional characterization of a pHis-tagged human bradykinin B2 receptor in COS-7 cells**  
Müller S, Adomeit A, Kaufmann R, [Appelhans H](#), Passow H, Reissmann S, Liebmann C  
Biol Chem: 381(4), 343-347 (2000)

#### 1998

- ▶ **Molecular analysis of regulation of gene expression of the human erythroid anion exchanger (AE) 1**  
Philipp S, Kneussel M, König J, [Appelhans H](#)  
FEBS Lett: 438(3), 315-320 (1998)

#### 1995

- ▶ **Inhibition of mouse erythroid band 3-mediated chloride transport by site-directed mutagenesis of histidine residues and its reversal by second site mutation of Lys 558, the locus of covalent H<sub>2</sub>DIDS binding**  
Müller-Berger S, Karbach D, König J, Lepke S, Wood PG, [Appelhans H](#), Passow H  
Biochemistry: 34(29), 9315-9324 (1995)

#### 1994

- ▶ **Expression of the anion exchanger (AE) gene family in human brain. Identification of a new AE protein: AE 0**  
Havenga MJ, Bosman GJ, [Appelhans H](#), De Grip WJ  
Brain Res Mol Brain Res: 25(1-2), 97-104 (1994)

#### 1993

- ▶ **Anion exchanger 1 in human kidney and oncocyoma differs from erythroid AE1 in its NH<sub>2</sub> terminus**  
Kollert-Jöns A, Wagner S, Hübner S, [Appelhans H](#), Drenckhahn D  
Am J Physiol: 265(6 Pt 2), F813-821 (1993)

#### 1992

- ▶ **Sequence analysis of the catalytic subunit of H(+)-ATPase from porcine renal brush-border membranes**  
Sander I, Lottspeich F, [Appelhans H](#), Kojro E, Spangenberg J, Weindel C, Haase W, Koepsell H  
Biochim Biophys Acta: 1112(1), 129-141 (1992)



- ▶ **Amplification and direct sequencing of a cDNA encoding human cytosolic 3-hydroxy-3-methylglutaryl-coenzyme A synthase**  
Russ AP, Ruzicka V, Maerz W, [Appelhans H](#), Gross W  
Biochim Biophys Acta: 1132(3), 329-331 (1992)
- ▶ **Amino acid sequence of band-3 protein from rainbow trout erythrocytes derived from cDNA**  
Hübner S, Michel F, Rudloff V, [Appelhans H](#)  
Biochem J: 285 ( Pt 1), 17-23 (1992)
- ▶ **Complete nucleotide sequence of band 3 related anion transport protein AE2 from human kidney**  
Gehrig H, Müller W, [Appelhans H](#)  
Biochim Biophys Acta: 1130(3), 326-328 (1992)
- ▶ **Anion transport in the red blood cell of the mouse and in erythroleukemic cells**  
Karbach D, Hanke-Baier P, Wendel J, Svetina S, Müller W, Hübner S, Münchow T, Appelhans H, Passow H in: Progress in Cell Research, Vol. 2 (Passow, H. and Bamberg, E. Eds.), pp 295-305. Elsevier, Science Publishers B.V. (1992)

#### 1991

- ▶ **Up-regulation of sodium pump activity in *Xenopus laevis* oocytes by expression of heterologous beta 1 subunits of the sodium pump**  
Schmalzing G, Gloor S, Omay H, Kröner S, [Appelhans H](#), Schwarz W  
Biochem J: 279 ( Pt 2), 329-336 (1991)
- ▶ **Expression and characterization of recombinant second domain variants of human mucus proteinase inhibitor (MPI )**  
Meckelein B, Kemme M, Nikiforov T, [Appelhans H](#), Gassen HG  
Biomed Biochim Acta: 50(4-6), 673-676 (1991)
- ▶ **The polymerase chain reaction**  
Appelhans H in Biotechnology Education: 2(1), 31-35 (1991)
- ▶ **Klonierung von cDNA mit Plasmiden**  
Appelhans H in: Gentechnische Methoden (Gassen HG, Martin A, Bertram S, Eds.) Gustav Fischer Verlag, Stuttgart, S.168-173 (1991)
- ▶ **Cloning the cDNA encoding the erythroid band 3 anion transporter of rainbow trout**  
Hübner S, Weindel C, Michel F, Rudloff V and Appelhans H in: Advances in Molecular Genetics 4, 219-227 (1991)

#### 1990

- ▶ **Nucleotide sequence of a porcine prepro atrial natriuretic peptide (ANP) cDNA**  
Mägert HJ, [Appelhans H](#), Gassen HG, Forssmann WG  
Nucleic Acids Res: 18(22), 6704 (1990)
- ▶ **Proteinase inhibitory activities of antileukoprotease are represented by its second COOH-terminal domain**  
Kramps JA, van Twisk C, [Appelhans H](#), Meckelein B, Nikiforov T, Dijkman JH  
Biochim Biophys Acta: 1038(2), 178-185 (1990)



- ▶ **The location of inhibitory specificities in human mucus proteinase inhibitor (MPI): separate expression of the COOH-terminal domain yields an active inhibitor of three different proteinases**

Meckelein B, Nikiforov T, Clemen A, [Appelhans H](#)  
Protein Eng: 3(3), 215-220 (1990)

- ▶ **Cloning the cDNA encoding the erythroid Band 3 anion transporter of rainbow trout**

Hübner S, Weindel C, Michel F, Rudloff V, Appelhans H  
Biol Chem Hoppe-Seyler: 371, 757-769 (1990)

### 1989

- ▶ **Cloning and expression of human salivary-gland kallikrein in Escherichia coli**

Angermann A, Bergmann C, [Appelhans H](#)  
Biochem J: 262(3), 787-793 (1989)

- ▶ **Die Nutzung gentechnischer Methoden zur Produktion wertvoller Proteine in Mikroorganismen**

Heilmann Hj, Strauß M, Stollwerk J, Appelhans H, Weiler H and Gassen HG (1989)  
Angewandte Makromolekulare Chemie: 166/167, 273-291 (1989)

- ▶ **Exression, purification and inhibitory activity of the second domain of human mucus**  
Appelhans H, Meckelein B, Nikiforov T, Clemen A and Appelhans B in: The 7th International Symposium on Intracellular Protein Catabolism (Katanuma N and Kominami E, Eds.), Springer Verlag and Japan Sci. Soc. Press, pp 410-411 (1989)

- ▶ **Studies on the antiproteolytic activity of the two domain structure proteinase inhibitor antileukoprotease**

Meckelein B, Nikiforov T and Appelhans H in: 7th DECHEMA Annual Meeting of Biotechnologists (Behrens D and Driesel AJ, Eds.) VCH Verlagsgesellschaft, Weinheim (1989)

### 1988

- ▶ **Chemical Synthesis and Cloning of Genes Encoding Protease Inhibitors**

Gassen HG, Appelhans H, Heinzel R and Dodt J in: DECHEMA Biotechnology Conferences Vol 1: Technology of Biological Processes - Safety in Biotechnology - Applied Genetic Engineering, VCH Verlagsgesellschaft, Weinheim, pp 243-248 (1988)

- ▶ **Chemical gene synthesis and cDNA in competition: cloning of genes encoding proteinase inhibitors**

Appelhans H, Dodt J, Bergmann C, Heinzel R and Gassen HG in: New Methods in Drug Research (Ed. Makriyannis A) Prous Sciences Publishers, Barcelona, pp 233-255 (1988)

### 1987

- ▶ **Secretion of antileucoprotease from a human lung tumor cell line**

Appelhans B, Ender B, Sachse G, Nikiforov T, [Appelhans H](#), Ebert W  
FEBS Lett: 224(1), 14-18 (1987)

- ▶ **The two domain structure of human antileukoprotease is reflected in the exon-intron distribution of the respective gene**

Mägert HJ, Meckelein B, Nikiforov T, Thiermann J, Appelhans H and Driesel AJ  
J Clin Chem Clin Biochem: 25, 575 (1987)



- ▶ **The neutrophil elastase-cathepsin G inhibitor of human mucus tissues and secretions (antileukoprotease, HUSI-I): complete primary structure as revealed by protein and DNA sequencing**

Heinzel R., Appelhans H., Gassen HG, Seemüller U, Arnold M, Fritz H, Lottspeich F, Wiedenmann K and Machleidt W. in: Pulmonary Emphysema and Proteolysis (Taylor JC and Mittman C, Eds.) Academic Press (1987)

- ▶ **Chemical gene synthesis and cDNA in competition: cloning of genes encoding proteinase inhibitors**

Dotz J, Bergmann C, Appelhans H, Heinzel R and Gassen HG in: Advances in Biosciences. Peptides and Proteases: Recent Advances (Schowen RL and Barth A, Eds.) Pergamon Press Ltd Vol 65, pp 189-196 (1987)

- ▶ **Anlage von Genbibliotheken**

Appelhans H in: Gentechnik (Gassen HG, Martin A, Bertram S, Eds.) Gustav Fischer Verlag, Stuttgart, S. 202-215 (1987)

## 1986

- ▶ **Molecular cloning and expression of cDNA for human antileukoprotease from cervix uterus**

Heinzel R, Appelhans H, Gassen G, Seemüller U, Machleidt W, Fritz H, Steffens G  
Eur J Biochem: 160(1), 61-67 (1986)

- ▶ **The acid-stable proteinase inhibitor of human mucous secretions (HUSI-I, antileukoprotease). Complete amino acid sequence as revealed by protein and cDNA sequencing and structural homology to whey proteins and Red Sea turtle proteinase inhibitor**

Seemüller U, Arnhold M, Fritz H, Wiedenmann K, Machleidt W, Heinzel R, Appelhans H, Gassen HG, Lottspeich F  
FEBS Lett: 199(1), 43-48 (1986)

## 1983

- ▶ **Characterization of a human genomic DNA fragment coding for a myosin heavy chain**

Appelhans H, Vosberg HP  
Hum Genet: 65(2), 198-203 (1983)