

## UNit published articles

### **The Effect of Charge Mutations on the Stability and Aggregation of a Human Single Chain Fv Fragment**

*James I. Austerberry et al.*

European Journal of Pharmaceutics and Biopharmaceutics (2017) 115, 18-30

### **Effect of PEG Molecular Weight and PEGylation Degree on the Physical Stability of PEGylated Lysozyme**

*Josefine Morgenstern, Pascal Baumann, Carina Brunner, Jürgen Hubbuch*

International Journal of Pharmaceutics (2017) 519(1-2), 408-417

### **The Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) and its Stability**

*Xin Meng, Jack Clews, Vasileios Kargas, Xiaomeng Wang, Robert C. Ford*

Cellular and Molecular Life Sciences (2017) 74, 23-38

### **Proofreading of Substrate Structure by the Twin-Arginine Translocase is Highly Dependent on Substrate Conformational Flexibility but Surprisingly Tolerant of Surface Charge and Hydrophobicity Changes**

*Alexander S. Jones et al.*

BBA – Molecular Cell Research (2016) 1863(12), 3116-3124

### **Prediction of Salt Effects on Protein Phase Behavior by HIC Retention and Thermal Stability**

*Kai Baumgartner, Steffen Großhans, Juliane Schütz, Susanna Suhm, Jürgen Hubbuch*

Journal of Pharmaceutical and Biomedical Analysis (2016) 128, 216-225

### **The Effects of Irradiation on the Biological and Biomechanical Properties of an Acellular Porcine Superflexor Tendon Graft for Cruciate Ligament Repair**

*Jennifer H Edwards et al.*

Journal of Biomedical Materials Research (2016)

### **Identification of Protein-Excipient Interaction Hotspots Using Computational Approaches**

*Teresa S. Barata, Cheng Zhang, Paul A. Dalby, Steve Brocchini, Mire Zloh*

International Journal of Molecular Sciences (2016) 17(6), 853

### **Structure of USP7 Catalytic Domain and Three Ubl-domains Reveals a Connector $\alpha$ -helix with Regulatory Role**

*Robbert Q. Kim, Willem J. van Dijk, Titia K. Sixma*

Journal of Structural Biology (2016) 195, 11-18

### **Mapping the Aggregation Kinetics of a Therapeutic Antibody Fragment**

*Nesrine Chakroun, David Hilton, Shahina S. Ahmad, Geoffrey W. Platt, Paul A. Dalby*

Molecular Pharmaceutics (2016) 13, 307-319

**Structural Hot Spots for the Solubility of Globular Proteins***Ashok Ganesan et al.*

Nat. Commun. (2016) 7, 10816 (doi:10.1038/ncomms10816)

**The Influence of Mixed Salts on the Capacity of HIC Adsorbers: A Predictive Correlation to the Surface Tension and the Aggregation Temperature***Kai Baumgartner, Stefan A. Oelmeier, Jurgen Hübbuch*

Biotechnology Progress (2016) 32(2), 346-354

**The Tribbles 2 (TRB2) Pseudokinase Binds to ATP and Autophosphorylates in a Metal-Independent Manner***Fiona P. Bailey et al.*

Biochemical Journal (2015) 467(1), 47-62

**Examination of Thermal Unfolding and Aggregation Profiles of a Series of Developable Therapeutic Monoclonal Antibodies***Mark L. Brader et al.*

Molecular Pharmaceutics (2015) 12(4), 1005-1017

**The First Step of Peptide Selection in Antigen Presentation by MHC Class I Molecules***Malgorzata A. Garstka et al.*

PNAS (2015) 112(5), 1505-1510

**Developability Assessment During the Selection of Novel Therapeutic Antibodies***Alexander Jarasch, et al.*

Journal of Pharmaceutical Sciences (2015) 104(6), 1185-1898

**Hoefavidin: A Dimeric Bacterial Avidin with a C-terminal Binding Tail***Orly Avraham, Amit Meir, Alexander Fish, Edward A. Bayer, Oded Livnah*

Journal of Structural Biology (2015) 191, 139-148

**'Dopamine-First' Mechanism Enables the Rational Engineering of the Norcoclaurine Synthase Aldehyde Activity Profile***Benjamin R. Lichman, et al.*

FEBS Journal (2015) 282, 1137-1151

**Accelerated Formulation Development of Monoclonal Antibodies (mAbs) and mAb-Based Modalities: Review of Methods and Tools***Vladimir I. Razinkov, Michael J. Treuheit, Gerald W. Becker*

Journal of Biomolecular Screening (2015) 20(4), 468-483

**Arginine Dipeptides Affect Insulin Aggregation in a pH- and Ionic Strength-Dependent Manner***Mariam M. Nuhu and Robin Curtis*

Biotechnology Journal (2015) 10(3), 404-416

**Orthogonal Methods for Characterizing the Unfolding of Therapeutic Monoclonal Antibodies: Differential Scanning Calorimetry, Isothermal Chemical Denaturation, and Intrinsic Fluorescence with Concomitant Static Light Scattering**

*Deniz B. Temel, Pavel Landsman, Mark L. Brader*

Methods in Enzymology (2015) 562, 355-385

**Identification of a Major Epitope Recognized by PLA2R Autoantibodies in Primary Membranous Nephropathy**

*Maryline Fresquet et al.*

Journal of the American Society of Nephrology (2014) 26, 302-313

**The Effect of Arginine Glutamate on the Stability of Monoclonal Antibodies in Solution**

*Priscilla Kheddo et al.*

International Journal of Pharmaceutics (2014) 473(1-2), 126-133

**High Throughput Prediction of the Long-term Stability of Pharmaceutical Macromolecules from Short-Term Multi-Instrument Spectroscopic Data**

*Nathaniel R. Maddux et al.*

Journal of Pharmaceutical Sciences (2014) 103(3), 828-839

**Preformulation Study of Highly Purified Inactivated Polio Vaccine, Serotype 3**

*Wei Qi et al.*

Journal of Pharmaceutical Sciences (2014) 103(1), 140-151

**A Low-Volume Screening Tool to Optimize Colloidal Stability for Highly Concentrated Protein Formulations**

*Melanie Hofmann, Matthias Winzer, Christian Weber, Henning Gieseler*

American Pharmaceutical Review (2014)

**Ensemble Refinement Shows Conformational Flexibility in Crystal Structures of Human Complement Factor D**

*Federico Forneris, B. Tom Burnley, Piet Gros*

Acta Crystallographica: Biological Crystallography (2014) D70, 733-743

**The Geminin and Idas Coiled Coils Preferentially Form a Heterodimer that Inhibits Geminin Function in DNA Replication Licensing**

*Christophe Caillat et al.*

Journal of Biological Chemistry (2013) 288(44), 31624-31634

**The Physical Stability of the Recombinant Tuberculosis Fusion Antigens H1 and H56**

*Mette Hamborg et al.*

Journal of Pharmaceutical Sciences (2013) 102(10), 3567-3578

**N-Terminal Truncation of an Isolated Human IgG1 CH2 Domain Significantly Increases its Stability and Aggregation Resistance***Rui Gong et al.*

Molecular Pharmaceutics (2013) 10, 2642-2654

**Impact of Short Range Hydrophobic Interactions and Long Range Electrostatic Forces on the Aggregation Kinetics of a Monoclonal Antibody and a Dual-Variable Domain Immunoglobulin at Low and High Concentrations***Vineet Kumar, Nitin Dixit, Liqiang (Lisa) Zhou, Wolfgang Fraunhofer*

International Journal of Pharmaceutics (2011) 421(1), 82-93

**Published reviews and book chapters mentioning UNit****Automation and High-Throughput Technologies in Biopharmaceutical Drug Product Development with QbD Approaches***Vladimir Razinkov, Jerry Becker, Cenk Undey, Erwin Freund, Feroz Jameel*

Advances in the Pharmaceutical Sciences (2015) 18, 475-510

**Marine Natural Products for Protein Misfolding Modulation***James C. Griffin and Kathryn Vanya Ewart*

Intech (2013), Using Old Solutions to New Problems - Natural Drug Discovery in the 21st Century, Dr. Marianna Kulka (Ed.) DOI: 10.5772/54585

**High-Throughput Biophysical Approaches to Therapeutic Protein Development***Feng He, Vladimir I. Raxinkov, C. Russell Middaugh, Gerald W. Becker*

Biophysics for Therapeutic Protein Development (2013) 4, 7-31