

BIOLOGICAL CHEMISTRY

*Founded in 1877 by Felix Hoppe-Seyler as
Zeitschrift für Physiologische Chemie*

Felix Hoppe-Seyler (1825–1895) was a pioneer of biochemistry, remembered not only for his discovery of hemoglobin and his contributions to the chemical characterization of many other biological compounds and processes but also for having been the mentor of Friedrich Miescher and Albrecht Kossel. In his preface to the first issue of *Zeitschrift für Physiologische Chemie*, Felix Hoppe-Seyler coined the term *Biochemistry* ('Biochemie') for the then newly emerging discipline.



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COVER ILLUSTRATION

The cover image depicts a structural superposition of human kallikrein-related peptidase 10 (KLK10, in deep purple) with the related zymogen pro-KLK6 (salmon) and active KLK2 (light grey), as observed in crystal structures. KLK10 shares disordered loop regions with either pro-KLK6 or KLK2, which can be seen as interrupted parts of the respective polypeptide backbones. These flexible parts, which form an allosteric network, are crucial for the active conformation of the protease and substrate binding. Also with respect to activity KLK10 has features of both a zymogen and an active protease. Moreover, KLK10 is expressed in various human tissues and body fluids and seems to have a tumor suppressor function in breast and prostate cancer, while its physiological and pathophysiological roles at large are little understood. For further details see the article by Debela et al. on pp. 1251–1264 in this issue.

Image courtesy of Peter Goettig, Structural Biology Group, Department of Molecular Biology, University of Salzburg, Austria. Supported by the Austrian Science Fund (FWF) with project P25003-B21.



Contents

Guest Editorial — 1215

HIGHLIGHT: 6TH INTERNATIONAL SYMPOSIUM ON KALLIKREINS AND KALLIKREIN-RELATED PEPTIDASES

Dorinne Desposito, Ludovic Waeckel, Louis Potier, Christine Richer, Ronan Roussel, Nadine Bouby and Francois Alhenc-Gelas

Kallikrein(K1)-kinin-kininase (ACE) and end-organ damage in ischemia and diabetes: therapeutic implications — 1217

Zela Keuylian and Alain Hovnanian

Mechanistic insight from murine models of Netherton syndrome — 1223

Hannu Koistinen, Erik Wallén, Henna Ylikangas, Kristian Meinander, Maija Lahtela-Kakkonen, Ale Närvänen and Ulf-Håkan Stenman

Development of molecules stimulating the activity of KLK3 – an update — 1229

Simon J. de Veer, Joakim E. Swedberg, Maria Brattsand, Judith A. Clements and Jonathan M. Harris

Exploring the active site binding specificity of kallikrein-related peptidase 5 (KLK5) guides the design of new peptide substrates and inhibitors — 1237

Mekdes Debela, Viktor Magdolen, Wolfram Bode, Hans Brandstetter and Peter Goettig

Structural basis for the Zn²⁺ inhibition of the zymogen-like kallikrein-related peptidase 10 — 1251

Nancy Ahmed, Julia Dorn, Rudolf Napieralski, Enken Drecol, Matthias Kotzsch, Peter Goettig, Eman Zein, Stefanie Avril, Marion Kiechle, Eleftherios P. Diamandis, Manfred Schmitt and Viktor Magdolen

Clinical relevance of kallikrein-related peptidase 6 (KLK6) and 8 (KLK8) mRNA expression in advanced serous ovarian cancer — 1265

Hyesook Yoon and Isobel A. Scarisbrick

Kallikrein-related peptidase 6 exacerbates disease in an autoimmune model of multiple sclerosis — 1277

Petr Kaspárek, Zuzana Iléninová, Radka Hanecková, Ivan Kanchev, Irena Jenicková and Radislav Sedláček

A viable mouse model for Netherton syndrome based on mosaic inactivation of the *Spink5* gene — 1287

Duncan J. Campbell

Therapeutic modulation of tissue kallikrein expression — 1293

Janet C. Reid, Nigel C. Bennett, Carson R. Stephens, Melanie L. Carroll, Viktor Magdolen, Judith A. Clements and John D. Hooper

***In vitro* evidence that KLK14 regulates the components of the HGF/Met axis, pro-HGF and HGF-activator inhibitor 1A and 1B — 1299**

John Lai, Jiyuan An, Srilakshmi Srinivasan, Judith A. Clements and Jyotsna Batra

A computational analysis of the genetic and transcript diversity at the kallikrein locus — 1307

Reviews

Isabel Meininger and Daniel Krappmann

Lymphocyte signaling and activation by the CARMA1-BCL10-MALT1 signalosome — 1315

Aldino Viegas, Thibault Viennet and Manuel Etzkorn

The power, pitfalls and potential of the nanodisc system for NMR-based studies — 1335

Research Articles/Short Communications

Cell Biology and Signaling

Safoura Khajeniazi, Mahin Solati, Yaghuob Yazdani, Masoud Soleimani and Anvarsadat Kianmehr

Synergistic induction of cardiomyocyte differentiation from human bone marrow mesenchymal stem cells by interleukin 1 β and 5-azacytidine — 1355