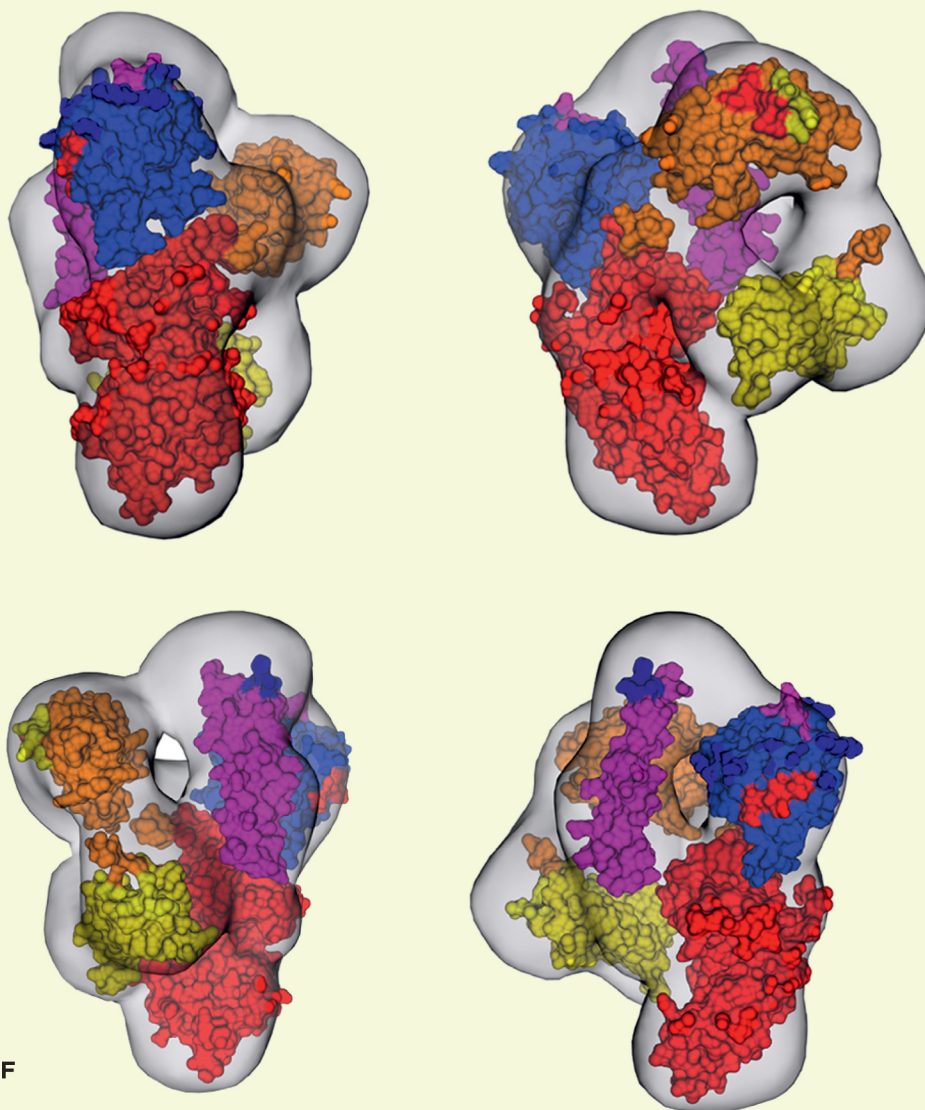


BIOLOGICAL CHEMISTRY



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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 domain architecture of Rasal, a Ras/Rap dual GTPase-activating protein (GAP), has been unravelled by the combination of low-resolution negative staining electron microscopy 3D reconstruction and molecular docking of high-resolution structures of domain homologues, offering a more complete understanding of the role of these modular domains in the Ras/Rap dual-specificity mechanism. On the front cover four views of homologous 3D structures of the distinct Rasal domains and the C-terminus 3D model docked into the protein 3D reconstruction (as surface representation) are shown. Color code: yellow, C2A domain; orange, C2B domain; red, RasGAP domain; blue, PH domain; purple, C-terminus (Ct), which is not a defined domain by itself and shows no similarity to any known 3D structure. For more information see the article by Cuellar et al. on pp. 63–72 in this issue.

High-resolution domain structure coordinates were from J.R. Walker, SCG, Canada; M. Guerrero-Valero, Murcia University, Spain; V. Pena, EMBL, Germany; G. Liu, NESG, USA. The model was generated using the Chimera program (USCF, USA); courtesy of B. Sot, IMDEA-Nanociencia, Madrid, Spain.



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Contents

Reviews

Louise A. Stephen, Yasmin Elmaghloob and Shehab Ismail
Maintaining protein composition in cilia — 1

Kamila Tomoko Yuyama, Diana Fortkamp and
Wolf-Rainer Abraham
**Eremophilane-type sesquiterpenes from fungi and their
medicinal potential — 13**

Marcel Zimmermann and Andreas S. Reichert
**How to get rid of mitochondria: crosstalk and regulation
of multiple mitophagy pathways — 29**

Minireviews

Simonas Savickas and Ulrich auf dem Keller
**Targeted degradomics in protein terminomics
and protease substrate discovery — 47**

Nguyen Thi Thanh Ho, Arne Kutzner and Klaus Heese
**Brain plasticity, cognitive functions and neural stem
cells: a pivotal role for the brain-specific neural master
gene |SRGAP2-FAM72-| — 55**

Research Articles/Short Communications

Protein Structure and Function

Jorge Cuellar, José María Valpuesta, Alfred Wittinghofer
and Begoña Sot
Domain topology of human Rasal — 63

Monika B. Dolinska and Yuri V. Sergeev
**The consequences of deglycosylation of recombinant
intra-melanosomal domain of human tyrosinase — 73**

Cell Biology and Signaling

Dawood Khan, Srividya Vasu, R. Charlotte Moffett,
Victor A. Gault, Peter R. Flatt and Nigel Irwin
**Locally produced xenin and the neurotensinergic
system in pancreatic islet function and β -cell
survival — 79**

Yuanyuan Meng, Qi Li, Lianwei Li and Rong Ma
**The long non-coding RNA CRNDE promotes cervical
cancer cell growth and metastasis — 93**