



Cover image: Conformational transition of the proteasome from a substrate-free to an actively degrading state.
The structures of the 26S proteasome in its substrate-free (left) and substrate-engaged state (right) identically oriented based on their 20S peptidase (grey), with a dashed line indicating the central axis of the peptidase pore. Substrate engagement induces a conformational rearrangement of the regulatory particle, including a rotation of Rpn2 (dark blue), Rpn13 (light orange), and the lid subcomplex (yellow), the formation of contacts between the ubiquitin receptor Rpn10 (purple) and the Rpt4-Rpt5 coiled coil, and a coaxial alignment of the N-ring and the AAA+ ring (both cyan) with the peptidase. Furthermore, the DUB Rpn11 (green) shifts to a central location, occluding the processing pore. (The extra density (red) observed in the reconstruction of the degrading proteasome is attributed to a globular domain of the substrate.) (from A. Martin; see M.E. Matyskiela, G.C. Lander, A. Martin (2013) Nat. Struct. Mol. Biol. 20, 781–788).

Publication information: *Biochimica et Biophysica Acta (Molecular Cell Research)* (ISSN 0167-4889). For 2013, volume 1833 (12 issues) is scheduled for publication. Subscription prices are available upon request from the Publisher or from the Elsevier Customer Service Department nearest you or from this journal's website (<http://www.elsevier.com/locate/bbamcr>). Further information is available on this journal and other Elsevier products through Elsevier's website (<http://www.elsevier.com>). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch. **Orders, claims, and journal inquiries:** please contact the Customer Service Department nearest you. **St. Louis:** Elsevier Customer Service Department, 3251 Riverport Lane, Maryland Heights, MO 63043, USA; phone: (877) 8397126 [toll free within the USA]; (+1) (314) 4478878 [outside the USA]; fax: (+1) (314) 4478077; e-mail: JournalCustomerService-usa@elsevier.com **Oxford:** Elsevier Customer Service Department, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) (1865) 843434; fax: (+44) (1865) 843970; e-mail: JournalCustomerServiceMEA@elsevier.com **Tokyo:** Elsevier Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg, 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: JournalCustomerServiceJapan@elsevier.com **Singapore:** Elsevier Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 63490222; fax: (+65) 67331510; e-mail: JournalCustomerServiceAPAC@elsevier.com **Author inquiries:** For inquiries relating to the submission of articles (including electronic submission) please visit this journal's homepage at <http://www.elsevier.com/locate/bbamcr>. For detailed instructions on the preparation of electronic artwork, please visit <http://www.elsevier.com/artworkinstructions>. Contact details for questions arising after acceptance of an article, especially those relating to proofs, will be provided by the publisher. You can track accepted articles at <http://www.elsevier.com/trackarticle>. You can also check our Author FAQs at <http://www.elsevier.com/authorFAQ> and/or contact Customer Support via <http://support.elsevier.com>. **Advertising information:** If you are interested in advertising or other commercial opportunities please e-mail Commercialsales@elsevier.com and your inquiry will be passed to the correct person who will respond to you within 48 hours.

Printed by Polestar Wheatons Ltd., Exeter, United Kingdom

© The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)

MOLECULAR CELL RESEARCH

Executive Editors:

Anita H. Corbett (*Atlanta, GA, USA*)
Nikolaus Pfanner (*Freiburg, Germany*)

Section Editors:

Diana Averill-Bates (*Montreal, Canada*)
Graham S. Baldwin (*Heidelberg, Victoria, Australia*)
Anthony J. Berdis (*Cleveland, OH, USA*)
Christoph Borner (*Freiburg, Germany*)
Guylain Boulay (*Québec, Canada*)
Barbara D. Boyan (*Atlanta, Georgia, USA*)
Yen-Chou Chen (*Taipei, Taiwan*)
Athar H. Chishti (*Boston, MA, USA*)
Zoran Culig (*Innsbruck, Austria*)
Ralf Erdmann (*Bochum, Germany*)
Simone Fulda (*Frankfurt, Germany*)
Robert L. Geahlen (*West Lafayette, IN, USA*)
Michael Greenwood (*Ontario, Canada*)
Jörg Höfheld (*Bonn, Germany*)
David A. Jans (*Melbourne, Australia*)
Peter L. Jones (*Philadelphia, PA, USA*)
Christian Kaltschmidt (*Witten, Germany*)
Jeffrey N. Keller (*Baton Rouge, LA, USA*)
Cheryl B. Knudson (*Greenville, NC, USA*)
Joachim Krebs (*Göttingen, Germany*)

Frank F. Madeo (*Graz, Austria*)
Alberto Martelli (*Bologna, Italy*)
Jean-Claude Martinou (*Geneva, Switzerland*)
Satyajit Mayor (*Bangalore, India*)
Katsuyoshi Mihara (*Fukuoka, Japan*)
Elizabeth Murphy (*Bethesda, MD, USA*)
Carla C. Oliveira (*São Paulo, Brazil*)
Lawrence A. Quilliam (*Indianapolis, IN, USA*)
Mark M. Rasenick (*Chicago, IL, USA*)
Juan Rosado (*Caceres, Spain*)
Stefan Rose-John (*Kiel, Germany*)
Peter Ruvolo (*Houston, TX, USA*)
M. Lienhard Schmitz (*Giessen, Germany*)
Eric A. Schon (*New York, NY, USA*)
Klaus Schulze-Osthoff (*Münster, Germany*)
Luca Scorrano (*Padova, Italy*)
Tao Tao (*Xiamen, China*)
Mark D. Turner (*London, UK*)
Guri Tzivion (*Detroit, MI, USA*)
Raghunatha Yammani (*Winston-Salem, NC, USA*)

Keywords that indicate the expertise of each Editor can be found on the journal homepage at <http://www.elsevier.com/locate/bbamcr>

Scientific Editors (*Elsevier, Cambridge, MA, USA*):

Shawna Buttery
Claudia Montefusco
Laura Wallins
Denise M. Wells (Manager)



ELSEVIER

Amsterdam – Boston – London – New York – Oxford – Paris –
Philadelphia – San Diego – St. Louis