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IN THIS ISSUE

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Cover

See Ester Boix and M. Victòria Nogués, p. 317. Antimicrobial ribonucleases. Eosinophil Cationic Protein (RNase 3) action on *Escherichia coli* cells, as visualized by scanning electron microscopy. Image reproduced by permission of Ester Boix and M. Victòria Nogués from *Mol. BioSyst.*, 2007, **5**, 317.

CHEMICAL BIOLOGY

Drawing together research highlights and news from all RSC publications, *Chemical Biology* provides a 'snapshot' of the latest developments in chemical biology, showcasing newsworthy articles and significant scientific advances.

Chemical Biology

May 2007/Volume 2/Issue 5

www.rsc.org/chembiology

HOT OFF THE PRESS

Hot off the Press

Hot off the Press highlights recently published work for the benefit of our readers. Our contributors this month have focused on TRP ion channels and a new method for DNA sequencing. New contributors are always welcome. If you are interested please contact molbiosyst@rsc.org for more information, we'd like to hear from you.

HOT OFF THE PRESS

HIGHLIGHT

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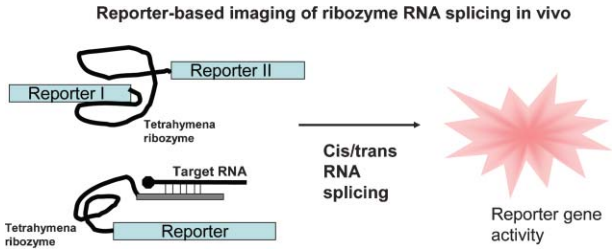

Visualizing RNA splicing *in vivo*

Gayatri Gowrishankar and Jianghong Rao*

Well established reporter gene systems have been applied to image the *cis* and *trans*-splicing activity of the *Tetrahymena* ribozyme *in vivo* in single cells and in whole living animals providing valuable insights into its function.

REVIEWS

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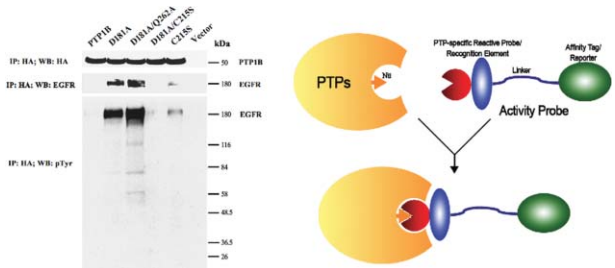

Proteomic approaches to studying protein tyrosine phosphatases

Fubo Liang, Sanjai Kumar and Zhong-Yin Zhang*

Two powerful proteomic approaches for rapidly establishing the exact functional roles of individual protein tyrosine phosphatases (PTPs) are discussed. Effective application of these proteomic techniques will accelerate the functional characterization of PTPs, thereby facilitating our understanding of PTPs in cell signaling and in diseases.

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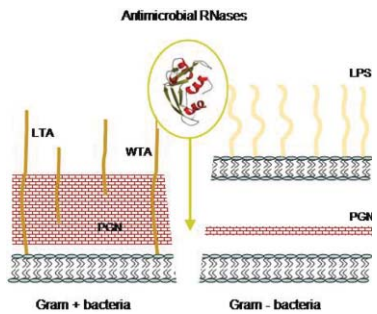

Mammalian antimicrobial proteins and peptides: overview on the RNase A superfamily members involved in innate host defence

Ester Boix* and M. Victòria Nogués

Several mammalian RNases participate in the host immunity. Evolutionary studies suggest that the family lineage started with an host defence role. To unravel their mechanism of action, we review here their properties, together with a general outlook on antimicrobial proteins.

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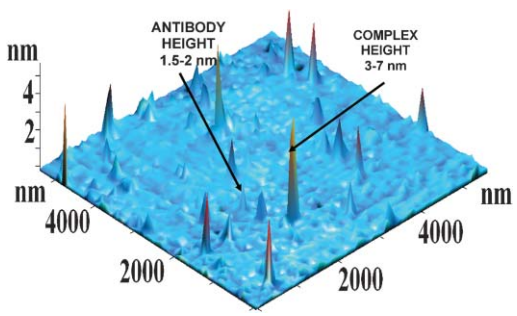
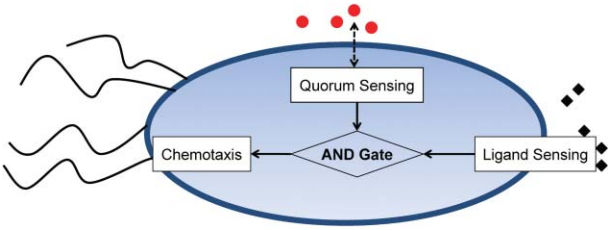


Analytical nanobiotechnology for medicine diagnostics

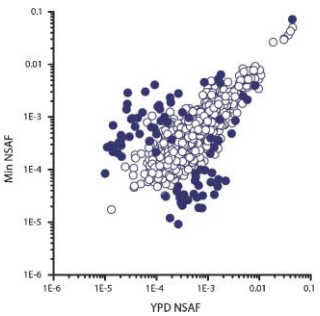
A. I. Archakov* and Yu. D. Ivanov

Nanotechnology in clinical proteomics is a new medical research direction, dealing with the creation and application of nanodevices for performing proteomic analyses in the clinic.

REVIEWS



PAPER



2nd International Symposium on Macrocyclic and Supramolecular Chemistry

24 - 28 June, 2007 - Salice Terme (Pavia) - Italy

The *2nd International Symposium on Macrocyclic and Supramolecular Chemistry*, will be held in Salice Terme (Pavia) – Italy, during the period 24 - 28 June, 2007. The state of the art in macrocyclic and supramolecular chemistry will be provided by top level lectures given by distinguished scientists in the field. Plenary speakers include: Paul D. Beer, Kristin Bowman–James, Thomas A. Kaden, Jean-Marie Lehn, Jean-Pierre Sauvage, Seiji Shinkai, J. Fraser Stoddart, Rocco Ungaro and David A. Leigh (recipient of the Izatt-Christensen Award 2007). The programme will feature also Invited and Short Lectures as well as Poster Presentations. Grants will be arranged for students and post-doctoral fellows. Participants will find accomodation in local Hotels from ★★ to ★★★★. Salice Terme is a well known spa and vacation resort, located in the south-western part of Lombardy, in an area rich of art and history and at the heart of a land famous for its wine production. The locality profits from a particularly mild, dry and nice climate. The green surroundings are perfect for excursions, open air sports and relax.

The deadline for registration and abstract submission is: **April 20th, 2007**

Information on Abstracts, Registration and Accomodation are available at the Symposium website:

www.unipv.it/ismsc07