Topical Collection

Rho GTPases in Health and Disease

Message from the Collection Editor

Rho GTPases are crucial organizers of the actin cytoskeleton with essential functions in cell migration and cell–cell contacts. In addition, Rho GTPases are involved in the regulation of stemness, proliferation and differentiation, and other cellular processes. Genetically modified mice provided, in the last few years, important and often surprising insights into the in vivo function of Rho GTPases, and cellular studies in vitro suggested novel molecular mechanisms underlying the observed effects.

Still, many questions remain to be investigated in order to understand Rho GTPase function in development and disease. For example, what is the role of Rho GTPase crosstalk in vivo? What is the importance of posttranslational modifications of Rho GTPases? How crucial is the parallel activation of different effector pathways by an activated Rho GTPase? How is Rho GTPase function in 3D systems related to 2D models, the currently preferred system for the molecular analysis of Rho GTPase signalling? Keywords

- Rho GTPases
- Actin cytoskeleton
- In vivo disease models
- Rho GTPase regulation
- 3D in vitro models
- Development

Collection Editor

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Cells

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Impact Factor 5.2
CiteScore 10.5
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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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