Special Issue

DOCK Proteins in Mammalian Physiology and Disease

Message from the Guest Editor

The Ras superfamily of GTP-binding proteins influences a very wide range of developmental, homeostatic, and pathobiological processes in mammals and lower organisms. The activation of most Ras-like proteins is potently facilitated by guanine nucleotide exchange factors (GEFs) which promote the exchange of GDP for GTP. The Ras superfamily consists of the Arf, Ran, Rab, Ras, and Rho branches. For the Rho branch, two structurally highly distinct classes of GEFs exist: Dbl (diffuse B-cell lymphoma) and DOCK (dedicator of cytokinesis). Initially, Dbl proteins received much attention for the simple reason that they were discovered earlier than DOCKs. However, DOCK proteins have since taken on substantial importance. DOCKs serve as GEFs for the Cdc42 and Rac GTPases and comprise a total of 11 members divided into four subfamilies, A–D, based on structural similarity and substrate preference. This upcoming Special Issue of *Cells* will provide an overview of the profound impact that individual DOCKs exert on mammalian physiology and disease.

Guest Editor

Dr. Steen H. Hansen

1. Children's Hospital Boston, Boston, MA, USA
2. Harvard Medical School, Boston, MA, USA

Deadline for manuscript submissions

closed (30 September 2022)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/63685

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

About the Journal

Message from the Editorial Board

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.

Editors-in-Chief

Dr. Alexander E. Kalyuzhny
Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).