

Topical Collection

New Insights into the Role of Glycogen Synthase Kinase (GSK) in Health, Metabolism and Diseases

Message from the Collection Editor

The activity of the GSK kinase is often aberrantly regulated in various diseases including cancers and brain disorders. Due to the diversity of GSK-3 cellular targets, global inhibition of the kinase may lead to severe side-effects. Thus, a selective modulation of a specific cellular pool of GSK-3 or specific down- or upstream partners of the kinase might provide more efficient therapies. The roles that GSK-3 plays in various diseases, as well as how this pivotal kinase interacts with multiple signaling pathways such as HEDGEHOG, NOTCH, PI3K/PTEN/Akt/mTOR, RAS/RAF/MEK/ERK, TP53, WNT/beta-catenin, and others will be discussed. Mutations that occur in these and other pathways can alter the effects that GSK-3 activity has on regulating these signaling circuits that can lead to various diseases. The roles that microRNAs play in GSK-3 regulation will also be evaluated. Targeting GSK-3 and these other pathways may improve therapy and overcome therapeutic resistance.

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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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