Special Issue

Cancer Cell Signaling, Autophagy and Tumorigenesis

Message from the Guest Editor

This Special Issue will highlight the PI3K/AKT/mTOR pathway, which promotes cell survival and growth by inhibiting apoptosis and regulating metabolism, and the Ras/Raf/MEK/ERK (MAPK) pathway, which drives proliferation and differentiation and is a common subject for mutation in cancers.

Among various other mechanisms, autophagy plays a particularly intricate role in tumorigenesis and metastasis. Autophagy shows tumor-suppressive role in the early stage of cancer and prevents the accumulation of damaged organelles and genomic instability. It also limits oncogenic transformation by clearing toxic aggregates. The tumor-promoting role of autophagy is represented by the induction of the rapeutic resistance. as it enhances cancer cell survival under stress. conditions for, e.g., hypoxia, nutrient deprivation, chemotherapeutics, and radiation. This helps cancer cells evade therapy-induced stress, leading to resistance and facilitating metastasis by promoting cellular plasticity. This Special Issue explores the intricate crosstalk between autophagy and cancer cell signaling, highlighting its impact on tumorigenesis, therapeutic resistance, and potential therapeutic interventions.

Guest Editor

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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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