

Special Issue

Autophagy and Viral Infections: The Era of New Therapeutical Strategies

Message from the Guest Editor

The autophagy system is a classical system that regulates the cellular homeostasis. The balance between healthy and pathological conditions is related to the development of new in vitro and in vivo therapeutic strategies in defining its clinical management in patients. The macroautophagy exacerbates the system's role in recycling and degrading macromolecules, and in damaging organelles and portions of cytoplasmic space. This cellular system is triggered by several stimuli under stress conditions. The LC3-II isoform is a marker of the onset of autophagy cascade, highlighting the synthesis of double vesicles enriched by cargo and the fusion with autolysomes. The last step requires the degradation of target cargo and the recycling of macronutrients. The viral infection is managed by the degradation of host microbes by the macroautophagy system (e.g., Influenzae Virus). However, gamma-herpesviruses hijack the autophagy system to sustain the viral maturation in the cytoplasmatic compartments.

Guest Editor

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