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Epigenetic regulation of autophagy: A key modification in cancer cells and cancer stem cells

Epigenetic regulation of autophagy in cancer

Abstract

Aberrant epigenetic alterations play a decisive role in cancer initiation and propagation *via* the regulation of key tumor suppressor genes and oncogenes or by modulation of essential signaling pathways. Autophagy is a highly regulated mechanism required for the recycling and degradation of surplus and damaged cytoplasmic constituents in a lysosome dependent manner. In cancer, autophagy has a divergent role. For instance, autophagy elicits tumor promoting functions by facilitating metabolic adaption and plasticity in cancer stem cells (CSCs) and cancer cells. Moreover, autophagy exerts pro-

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