
Crosstalk of mTOR/HIF-1a/PKM2 and STAT3/C-MYC signaling pathways regulate the energy metabolism and acidic microenvironment of gastric cancer

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Abstract: Gastric cancer is a common malignant tumor in China. The crosstalk of mTOR/HIF-1a/PKM2 and STAT3/C-MYC signaling pathways regulate the energy metabolism and acidic microenvironment of gastric cancer. This study aims to explore the role of these signaling pathways in gastric cancer. We found that mTOR/HIF-1a/PKM2 and STAT3/C-MYC signaling pathways are up-regulated in gastric cancer cells. The inhibition of these pathways can lead to the down-regulation of energy metabolism and the neutralization of the acidic microenvironment. These results suggest that the crosstalk of these signaling pathways is an important mechanism for gastric cancer progression.

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