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Hepatitis C virus core protein modulates several signaling pathways involved in hepatocellular carcinoma

Mahmoudvand S *et al.* Modulation of signaling pathways involved in HCC

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Abstract

Hepatocellular carcinoma (HCC) is the fifth most common cancer, and hepatitis C virus (HCV) infection plays a major role in HCC development. The molecular mechanisms by which HCV infection leads to HCC are varied. HCV core protein is an important risk factor in HCV-associated liver pathogenesis and can modulate several signaling pathways involved in cell cycle regulation, cell growth promotion, cell proliferation, apoptosis, oxidative stress and lipid metabolism. The dysregulation of signaling pathways such as transforming growth factor β (TGF- β), vascular endothelial growth factor (VEGF), Wnt/ β -catenin (WNT), cyclooxygenase-2 (COX-2) and peroxisome proliferator-activated receptor α (PPAR α) by HCV core protein is implicated in development of HCC. Therefore, it is suggested that this protein should be considered as a favorable target for further studies in the development of HCC. In addition, considering the axial role of these signaling pathways in HCC, they are considered as drugable targets for cancer therapy.

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Hepatitis C Virus Core Protein Modulates ... - Journal of Virology

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Hepatitis C virus core protein modulates several signaling pathways invol  

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