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SKP2 and CKS1 Promote Degradation of Cell Cycle Regulators and Are Associated With Hepatocellular Carcinoma Prognosis

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The cell cycle regulators $P21^{WAF1}$, $P27^{KIP1}$, $P57^{KIP2}$, P130, RASSF1A, and FOXO1 are down-regulated during hepatocellular carcinoma (HCC) pathogenesis. We investigated the role of the ubiquitin ligase subunits CKS1 and SKP2 which regulate proteasome degradation of cell cycle regulators in HCC progression.

紹介論文

SKP2 and CKS1 Promote Degradation of Cell Cycle Regulators and Are Associated With Hepatocellular Carcinoma Prognosis

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要旨:

Hepatocellular carcinoma (HCC) is one of the most lethal cancers and affects many of the world's populations. Better understanding of molecular mechanisms underlying liver carcinogenesis may allow identification of novel molecular markers for HCC progression and development of new diagnostic and therapeutic. By controlling the levels of various cell cycle and signal transduction inhibitors, in normal cells, Skp2 acts as an important cell function regulator. Due to SKP2 uncontrolled up-regulation may favor cell transformation in vitro and tumor progression, its inhibition may be therapeutically relevant. In addition, numerous reports indicate that the expression of cell cycle regulators ubiquitinated and degraded by CKS1-SKP2 ligase influences human HCC progression. Hence, evaluation on the role of CKS1-SKP2 ligase activity as a promising diagnostic marker is important for the development of anticancer drugs.

参考論文:

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