

上海市生物化学与分子生物学学会

2019 年青年学术论坛

优秀青年报告 推荐表

姓 名	姚良芳	性 别	女
E-mail	yao_elina@163.com	手 机	13262995693
单位/院校	华东师范大学	职 称	博士后
报告题目	REGγ Promotes Hepatocellular Carcinoma via PP2Ac-PRAS40/mTOR-HIF1α/Glycolysis axis		
报告摘要	<p>Cancer cells undergo metabolic adaptation to sustain uncontrolled proliferation. Although REGγ, a proteasome activator, is demonstrated high expression in cancer tissues and promoted tumorigenesis, how REGγ as a metabolic regulator controlled the Warburg effect in hepatocellular carcinoma remains unknown. Here, we demonstrate that REGγ is strongly overexpressed in human hepatocellular carcinoma (HCC). Mice deficient for REGγ show significantly attenuated DEN-induced tumor formation. Mechanistically, depleted REGγ restricts mTORC1 signaling by increasing the serine-threonine phosphatase catalytic subunit (PP2Ac) stability to dephosphorylate Pras40, thereby facilitating the interaction of Pras40 with the mTORC1 component Raptor to inactive mTORC1-mediated hyper-glycolytic metabolism. Collectively, our study identifies REGγ as a metabolic regulator via degrading PP2Ac in vitro and in cells activates mTORC1-HIF1α axis to enhance Warburg effect, finally promoting hepatocytes cell proliferation and HCC growth in mice. Thus, our findings suggest that an essential regulatory mechanism for regulating mTORC1 activity and provides a potential therapeutic target for HCC treatment by targeting REGγ.</p>		
论文发表情况 (近三年)	<ol style="list-style-type: none"> 1. Liangfang Yao, Lei Zhou, Yang Xuan, Pei Zhang, Xiaoshuang Wang, Tianyuan Meng, Yanyan Xue, Xueqing Ma, Abdus Saboor Shah, Shiwang Shang, Xinglong Ma, Wei Xie, Yanyang Xia, Hao Wang, Robb E Moses, Lei Li, Jianru Xiao, Bianhong Zhang, Xiaotao Li, The proteasome activator REGγ counteracts immunoproteasome expression and autoimmunity, <i>Journal of Autoimmunity</i>. 2019.05.010. 2. Lei Zhou*, Liangfang Yao*, Wei Xie, Xiaoshuang Wang, Jinjin Xu, Qingxia Lin, Yang Xuan, Huihui Zhang, Lei Ji, Lu Wang, Weicang Wang, Weichao Wang, Tingting Shi, Lei Fang, Biao Zheng, Lei Li, Bianhong Zhang, Xiaotao Li, REGγ controls Th17 cell differentiation and autoimmune inflammation by regulation of dendritic cells, <i>Cellular & Molecular Immunology</i>. 		

请在 **2019 年 8 月 29 日** 之前提交推荐表至学会办公室 ssbmb@sibs.ac.cn。

邮件主题注明：2019 年青年论坛