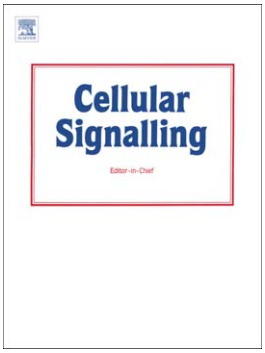

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Distinctive microRNA signature associated of neoplasms with the Wnt/β-catenin signaling pathway

Xu Sun[a,b], Yong He[a,b], Cheng Huang[a,b], Tao-Tao Ma[a,b], Jun Li[a,b]*

[a] School of pharmacy, Anhui key laboratory of bioactivity of natrual products, Anhui Medical University, Hefei 230032, China

[b] The Key Laboratory of Anti-inflammatory and Immune medicine (Anhui Medical University), Ministry of Education, P.R. China

*Corresponding author: Professor. Jun Li, School of Pharmacy, Anhui Medical University, Mei Shan Road, Hefei, Anhui Province, China 230032.

Phone: +86 551 65161001

Fax: +86 551 65161001

E-mail addresses: sunxuapril@hotmail.com; lj@ahmu.edu.cn.

Abbreviation: FZD, Frizzled; LDL receptor–related protein, LRP; Dvl, Dishevelled; APC, adenomatous polyposis coli; CK1α, casein kinase 1α; GSK3β, glycogen synthase kinase 3β; HCC, hepatocellular carcinoma; EZH2, zeste homologue 2; sFRPs, secreted Frizzled-related proteins; DKK, Dickkop; miRs, MicroRNAs; WIF, Wnt inhibitory factor; TCF, T-cell factor; LEF, lymphoid enhancer-binding factor; IRS, insulin receptor substrate; NLK ,Nemo-like kinase.

ABSTRACT

As the crucial biological regulators, microRNAs that act by suppressing their target genes are involved in a variety of pathophysiological processes. It is generally accepted that microRNAs are often dysregulated in many types of neoplasm and other human diseases. In neoplasm, microRNAs may function as oncogenes or tumor suppressors. As constitutive activation of the Wnt signaling pathway is a common feature of neoplasm and contributes to its development, progression and metastasis in various cancers, numerous studies have revealed that microRNAs-mediated gene regulation are interconnected with the Wnt/β-catenin signaling pathway, forming an