Int J Physiol Pathophysiol Pharmacol 2011;3(2):156-166.

Review Article

The roles of microRNAs in tumorigenesis and angiogenesis

Minghua Li, Zhi-Gang Xiong

Department of Psychology, Washington State University, Vancouver, WA, USA. Neuroscience Institute, Morehouse School of Medicine, Atlanta, GA, USA.

Received June 23, 2011; accepted June 26, 2011; Epub June 27, 2011; Published June 30, 2011

Abstract: Cancer is a leading cause of death in the world. Conventional treatments have severe side effects and low survival rate. It is important to discover new targets and therapeutic strategies to improve the clinical outcomes of cancer patients. Ion channels are specialized membrane proteins that play important roles in various physiological processes. Recent studies have shown that abnormal expression and/or activity of a number of ion channels e.g. voltage-gated K+, Na+, Ca2+ channels, TRP channels, and epithelial Na+/degenerin family of ion channels, are involved in the growth/proliferation, migration and/or invasion of cancer cells. In this review, we summarize the present knowledge about the roles of different ion channels in the development of cancer(IJPPP1106003).

Keywords: Ion channels, cancer, therapeutic targets, voltage-gated K+, Na+, Ca2+ channels, TRP channels, and epithelial Na+/degenerin family of ion channels

Full Text PDF

Address all correspondence to:
Minghua Li, PhD
Department of Psychology, Washington State University
Vancouver, WA, USA. E-mail: Minghua.li@vancouver.wsu.edu;

Zhi-Gang Xiong, MD, PhD, Neuroscience Institute, Morehouse School of Medicine, Atlanta, GA, USA. E-mail: zxiong@msm.edu

IJPPP Copyright © 2009-All rights reserved. Published by e-Century Publishing Corporation, Madison, WI 53711