

Recent Publications by LC Sciences' Customers

Small RNA Discovery, Analysis

- Lee I, Ajay SS, Chen H, Maruyama A, Wang N, McInnis MG, Athey BD. (2008) **Discriminating single-base difference miRNA expressions using microarray Probe Design Guru (ProDeG)**. *Nucleic Acids Res* 36(5), e27.
- Cummins JM, He Y, Leary RJ, Pagliarini R, Diaz L.A Jr, Sjoblom T, Barad O, Bentwich Z, Szafranska AE, Labourier E, et al. (2006) **The colorectal microRNAome**. *Proc Natl Acad Sci USA* 103, 3687-92.

Cancer Research

- Tavazoie SF, Alarcón C, Oskarsson T, Padua D, Wang Q, Bos PD, Gerald WL, Massagué J. (2008) **Endogenous human microRNAs that suppress breast cancer metastasis**. *Nature* 451(7175), 147-52.
- Sun M, Estrov Z, Ji Y, Coombes KR, Harris DH, Kurzrock R. (2008) **Curcumin (diferuloylmethane) alters the expression profiles of microRNAs in human pancreatic cancer cells**. *Mol Cancer Ther* 7(3), 464-73.
- Lin SL, Chiang A, Chang D, Ying SY. (2008) **Loss of mir-146a function in hormone-refractory prostate cancer**. *RNA* 14(3), 417-24.
- Weidhaas JB, Babar I, Nallur SM, Trang P, Roush S, Boehm M, Gillespie E, Slack FJ. (2007) **MicroRNAs as potential agents to alter resistance to cytotoxic anticancer therapy**. *Cancer Res* 67(23), 11111-16.
- Hebert C, Norris K, Scheper MA, Nikitakis N, Sauk JJ. (2007) **High mobility group A2 is a target for miRNA-98 in Head and Neck Squamous Cell Carcinoma**. *Mol Cancer* 6(1), 5.
- Pogribny IP, Tryndyak VP, Boyko A, Rodriguez-Juarez R, Beland FA, Kovalchuk O. (2007) **Induction of microRNAome deregulation in rat liver by long-term tamoxifen exposure**. *Mutat Res* 619(1-2), 30-37.
- Koturbash I, Boyko A, Rodriguez-Juarez R, McDonald R, Tryndyak V, Kovalchuk I, Pogribny I, Kovalchuk O. (2007) **Role of epigenetic effectors in maintenance of the long-term persistent bystander effect in spleen in vivo**. *Carcinogenesis* 28(8), 1831-38.
- Shah YM, Morimura K, Yang Q, Tanabe T, Takagi M, Gonzalez FJ. (2007) **Peroxisome proliferator-activated receptor alpha regulates a microRNA-mediated signaling cascade responsible for hepatocellular proliferation**. *Mol Cell Biol* 27(12), 4238-47.
- Kovalchuk O, Tryndyak VP, Montgomery B, Boyko A, Kutanzi K, Zemp F, Warbritton AR, Latendresse JR, Kovalchuk I, Beland FA, Pogribny IP. (2007) **Estrogen-induced rat breast carcinogenesis is characterized by alterations in DNA methylation, histone modifications and aberrant microRNA expression**. *Cell Cycle* 6(16), 2010-18.
- Saito Y, Liang G, Egger G, Friedman JM, Chuang JC, Coetzee GA, Jones PA. (2006) **Specific activation of microRNA-127 with downregulation of the protooncogene BCL6 by chromatin-modifying drugs in human cancer cells**. *Cancer Cell* 9(6), 435-43.

Cardiovascular Research

- Sayed D, Hong C, Chen IY, Lypowy J, Abdellatif M. (2007) **MicroRNAs Play an Essential Role in the Development of Cardiac Hypertrophy**. *Circ Res* 100(3), 416-24.
- Cheng Y, Ji R, Yue J, Yang J, Liu X, Chen H, Dean DB, Zhang C. (2007) **MicroRNAs Are Aberrantly Expressed in Hypertrophic Heart. Do They Play a Role in Cardiac Hypertrophy?** *Am J Pathol* 170(6), 1831-40.
- Ji R, Cheng Y, Yue J, Yang J, Liu X, Chen H, Dean DB, Zhang C. (2007) **MicroRNA Expression Signature and Antisense-Mediated Depletion Reveal an Essential Role of MicroRNA in Vascular Neointimal Lesion Formation**. *Circ Res* 100(11), 1579-88.

Neuroscience

- Stark KL, Xu B, Bagchi A, Lai WS, Liu H, Hsu R, Wan X, Pavlidis P, Mills AA, Karayiorgou M, Gogos JA. (2008) **Altered brain microRNA biogenesis contributes to phenotypic deficits in a 22q11-deletion mouse model**. *Nat Genet* [Epub ahead of print]
- Gillardon F, Mack M, Rist W, Schnack C, Lenter M, Hildebrandt T, Hengerer B. (2008) **MicroRNA and proteome expression profiling in early-symptomatic Δ -synuclein(A30P)-transgenic mice**. *Proteomics Clin Appl* 2(5), 697-705.
- Jeyaseelan K, Lim KY, Armugam A. (2008) **MicroRNA Expression in the Blood and Brain of Rats Subjected to Transient Focal Ischemia by Middle Cerebral Artery Occlusion**. *Stroke* 39(3), 959-66.
- Burmistrova OA, Goltsov AY, Abramova LI, Kaleda VG, Orlova VA, Rogaev EI. (2007) **MicroRNA in schizophrenia: genetic and expression analysis of miR-130b (22q11)**. *Biochemistry (Mosc)* 72(5), 578-82.

Recent Publications by LC Sciences' Customers

- Lee HJ, Palkovits M, Young, WS 3rd. (2006) **From the Cover: miR-7b, a microRNA up-regulated in the hypothalamus after chronic hyperosmolar stimulation, inhibits Fos translation.** *Proc Natl Acad Sci USA* 103, 15669-74.
- Rogaev E.I. (2005) **Small RNAs in human brain development and disorders.** *Biochemistry (Mosc)* 70, 1404-07.

Reproductive Biology

- Kuramochi-Miyagawa S, Watanabe T, Gotoh K, Totoki Y, Toyoda A, Ikawa M, Asada N, Kojima K, Yamaguchi Y, Ijiri TW, Hata K, Li E, Matsuda Y, Kimura T, Okabe M, Sakaki Y, Sasaki H, Nakano T. (2008) **DNA methylation of retrotransposon genes is regulated by Piwi family members MILI and MIWI2 in murine fetal testes.** *Genes Dev* 22(7), 908-17.
- Choi Y, Qin Y, Berger MF, Ballow DJ, Bulyk ML, Rajkovic A. (2007) **Microarray Analyses of Newborn Mouse Ovaries Lacking Nobox.** *Biol Reprod* 77(2), 312-19.
- Marsh EE, Lin Z, Yin P, Milad M, Chakravarti D, Bulun SE. (2007) **Differential expression of microRNA species in human uterine leiomyoma versus normal myometrium.** *Fertil Steril* [Epub ahead of print].
- Vagin VV, Sigova A, Li C, Seitz H, Gvozdev V, Zamore PD. (2006) **A distinct small RNA pathway silences selfish genetic elements in the germline.** *Science* 313(5785), 320-24.
- Amanai M, Brahmajoyula M, Perry AC. (2006) **Restricted role for sperm-borne microRNAs in mammalian fertilization.** *Biol Reprod* 75(6), 877-84.

Plant Science

- Pant BD, Buhtz A, Kehr J, Scheible WR. (2008) **MicroRNA399 is a Long-Distance Signal for the Regulation of Plant Phosphate Homeostasis.** *Plant J* 53(5), 731-38.
- Buhtz A, Springer F, Chappell L, Baulcombe DC, Kehr J. (2008) **Identification and characterization of small RNAs from the phloem of Brassica napus.** *Plant J* 53(5), 739-49.
- Shibolet Y, Haronsky E, Leibman D, Arazi T, Wassenegger M, Whitham SA, Gaba V, Gal-On A. (2007) **The conserved FRNK box in HC-Pro, a plant viral suppressor of gene silencing, is required for small RNA binding and mediates symptom development.** *J Virol* 81(23), 13135-48.

Virology (HIV, Epstein-Barr)

- Eletto D, Russo G, Passiatore G, Del Valle L, Giordano A, Khalili K, Gualco E, Peruzzi F. (2008) **Inhibition of SNAP25 expression by HIV-1 Tat involves the activity of mir-128a.** *J Cell Physiol* [Epub ahead of print].
- Cameron JE, Yin Q, Fewell C, Lacey M, McBride J, Wang X, Lin Z, Schaefer BC, Flemington EK. (2008) **The Epstein-Barr Virus latent membrane protein 1 (LMP1) induces cellular microRNA-146a, a modulator of lymphocyte signaling pathways.** *J Virol* 82(4), 1946-58.
- Huang J, Wang F, Argyris E, Chen K, Liang Z, Tian H, Huang W, Squires K, Verlinghieri G, Zhang H. (2007) **Cellular microRNAs contribute to HIV-1 latency in resting primary CD4(+) T lymphocytes.** *Nat Med* 13(10), 1241-47.
- Huang J, Liang Z, Yang B, Tian H, Ma J, Zhang H. (2007) **Derepression of micro-RNA-mediated protein translation inhibition by apolipoprotein B mRNA-editing enzyme catalytic polypeptide-like 3G (APOBEC3G) and its family members.** *J Biol Chem* 282(46), 33632-40.

Stem Cell Research

- Singh SK, Kagalwala MN, Parker-Thornburg J, Adams H, Majumder S. (2008) **REST maintains self-renewal and pluripotency of embryonic stem cells.** *Nature* 453(7192), 223-27.
- Tay YM, Tam WL, Ang YS, Gaughwin PM, Yang HH, Wang W, Liu R, George J, Ng HH, Perera RJ, Lufkin T, Rigoutsos I, Thomson AM, Lim B. (2007) **MicroRNA-134 Modulates the Differentiation of Mouse Embryonic Stem Cells where it Causes Post-transcriptional Attenuation of Nanog and LRH1.** *Stem Cells* 26(1), 17-29.

Endocrinology

- Cohen A, Shmoish M, Levi L, Cheruti U, Levavi-Sivan B, Lubzens E. (2007) **Alterations in microRNA expression profiles reveal a novel pathway for estrogen regulation.** *Endocrinology* 149(4), 1687-96.