



## Mohammad Reza Mirzaei

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Ph.D of molecular Genetics, Assistants professor in Rafsanjan  
University of Medical Sciences

### **Educations:**

**Ph.D of Molecular Genetics**, Tarbiat Modares University, Tehran, Iran, 2014

**M.Sc. of Human Genetics**, Tehran University of Medical Sciences, Tehran, Iran,  
1996

**B.Sc. of Microbiology**, Kerman University, Kerman, Iran, 1992

### **Skills:**

- \* Cancer (Molecular study)
- \*Cell Culture & Gene Cloning
- \*Gene transfection (siRNA,miRNA,...)
- \* Gene Expression Profiling (PCR Array, Real-Time PCR, PCR)
- \* Gene mutation detection methods (PCR-SSCP, DGGE, PGGE...)
- \* Cytogenetics (karyotype, Chromosomal banding...), FISH,.....
- \* Immunogenetics (autoimmune disease...)

## **Publications:**

- 1) **MR Mirzaei**, P. Mehdipour, M. Atri, H. Timuri and GR. Asadi. Detection of mutation in P53 gene in exons 5 and 8 in patients of familial breast cancer by PCR-SSCP method. Rafsanjan Medical University journal. 2003; 1(2):119-125.
- 2) **MR Mirzaei**, GR. Asadi, M. Mahmuodi, MR. Hajizadeh, M. muosavi, AR Sayadi and H. Hosini. Evaluation of Fragile X Syndrome in moderate mental retardations in Rafsanjan city. Rafsanjan Medical University journal. 2007; 5(1):17-22.
- 3) GR Asadi Karam, **MR Mirzaei**, M- Mahmoodi, MJ. Rasae, M. pooramir: Extraction and purification of anti-protein 3 (PR3) antibodies from egg yolk. Iranian Biochemical Journal. 2005; 9(1):41-45.
- 4) H. Timuri, P. Mehdipour, M. Atri and **MR. Mirzaei**. Detection of gene mutation in exons 3, 10 and 12 of BRCA1 gene in 30 patients of familial breast cancer. Gorgan Medical University journal. 2002; 3(8):19-24.
- 5) A. Jafarzadeh, M. Kazemi Arababadi, **MR. Mirzaei**, E. Rezazadeh. Occult hepatitis B virus infection among blood donors with antibodies to hepatitis B core antigen ACTA MEDICA IRANICA. 2008; 46(1):27-32.
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- 7) A. Jafarzadeh, R. Vazirinejad, GH. Hassanshahi, MA. Sajjadi and **MR. Mirzaei**. Evaluation of some immune system components in hyperthyroid women. Sabzevar Medical University journal. 2007; 14(2):103-109.
- 8) Mohammad Kazemi Arababadi, **Mohammad Reza Mirzaei**, Ebrahim Rezazadeh Zarandi and Gholamhossein Hassanshahi. Analysis of  $\delta\text{C}32$  mutation

in CCR5 gene in breast cancer patients in Kerman province of Iran. Journal of Mazandaran University of Medical Sciences, 2009; 19 (70): 49-53.

9) Abdollah Jafarzadeh, Mohammad Kazemi Arababadi, **Mohammad Reza Mirzaei** and Abbasali Pourazar. Occult hepatitis B virus infection among blood donors with antibodies to hepatitis B core antigen. Acta Medica Iranica, 2008; 46 (1): 27-32.

10) Mohammad Kazemi Arababadi, **Mohammad Reza Mirzaei**, Seyed Mohammad Ali Sajadi, Gholamhasein Hasanshahi, Behzad Nasiri Ahmadabadi, Vajihe Akbarpour Salehabadi, Reza Derakhshan and Derek Kennedy. Interleukin (IL)-10 gene polymorphisms are associated with type 2 diabetes with and without nephropathy: A study of patients from the southeast region of Iran. Inflammation. 2012 ;35(3):797-802

11) **Mohammad Reza Mirzaei**, Gholamhossein Hassanshahi, Mehdi Mahmoodi, Mohammad Reza Hajizadeh, Fahmideh Bagrezaei and Mehdi Chehardoli. RNA interference – mediated silencing of OCT4B1 alters expression of several TNF ligand/receptor transcripts in human tumor cell lines. Pharmaceutical Sciences journal. 2014;20;113-120.

12) **Mirzaei MR**, Najafi A, Arababadi MK, Asadi MH, Mowla SJ. Altered expression of apoptotic genes in response to OCT4B1 suppression in human tumor cell lines. Tumour Biol. 2014; 35:9999-10009.

13) Momeni M, **Reza Mirzaei M**, Zainodini N, Hassanshahi G, Arababadi MK. MiR-143 induces expression of AIM2 and ASC in Jurkat cell line. Iran J Immunol. 2013 Jun; 10(2):103-9.

14) Nazari M, Hajizadeh MR, Mahmoodi M, **Mirzaei MR** and Hasanshahi GH. The Regulatory Impacts of Morus Alba Leaf Extract on Some Enzymes Involved

in Glucose Metabolism Pathways in Diabetic Rat Liver. Clin. Lab. 2013; 59:497-504.

15) Seyyed Javad Afsah Hejri, **Mohammad Reza Mirzaei**, Mohammad Kazemi Arababadi, Gholamhossein Hassanshahi, Mehdi Mahmoodi. OCT4B1 Down-Regulates Self-Renewal Genes in Cancer Cell Lines. Pharmaceutical sciences, 2014, 19(4), 117-123.

16) **M.R. Mirzaei** (PhD), G.H. Hasanshahi (PhD), M.R. Hajizadeh (PhD), M. Mahmoodi(PhD), M. Nazari (BSc), M. Chahardoli (BSc). The Correlation between OCT4B1 and Apoptosis in Human Cancer Cell Lines. J Babol Univ Med Sci, 2015, 17(1), 37-44.

17) J. Fathalizadeh, V. Bagheri, H. Khoramdeleazad, M. Kazemi Arababadi, A. Jafarzadeh, **MR. Mirzaei**, A. Shamsizadeh and MR. Hajizadeh. Induction of apoptosis by pistachio (*pistacia vera* L.) hull extract and its molecular mechanisms of action in human hepatoma cell line HepG2. Cell. Mol. Biol. 2015; 61(7):128-134.

18) **Mirzaei MR**, Arababadi MK, Asadi MH, Mowla SJ. Altered expression of high molecular weight heat shock proteins after OCT4B1 suppression in human tumor cell lines. Cell Journal. 2016; 17(4):608-616.

19) **Mohammad Reza Mirzaei**, Malek aahossein Asadi, Seyyed Javad Mowla, Gholamhossein Asadi, Zahra Ahmadi. Down-regulation of HSP40 gene family following *OCT4B1* suppression in human tumor cell lines. Iran J Basic Med Sci. 2016; 19(2):187-193.

20) **Mohammadreza Mirzaei** , Mahdi Mahmoudi, Gholamhossein Hassan Shahi, Amir Rahnama, Mahmoud Sheikh Fathollahi , Fahmideh Bagrezai. The comparison of selfrenewal gene expression pattern in cancer cell lines, tumor tissue and normal tissue of the bladder tumor. J Shahrekord Univ Med Sci 2016, 18(2): 54-61.

- 21) Fahmideh Bagrezaei, Mehdi Mahmoodi, Mohammad Reza Hajizadeh, Vajihe Akbarpoor, Reza Bahramabadi and **Mohammad Reza Mirzaei**. Curcumin Effect on the Expressional Profile of OCT4, Nanog and Nucleostemin Genes in AGS(Adenocarcinoma) Cancer Cell Line. *Zahedan J Res Med Sci*. 2016; 18(7):e7555.
- 22) Hosseini FS, Fattahpour Sh, Asadpour M, Hassanshahi Gh, Hajizade MR, Khoshdel A, **Mirzaei MR**, Mahmoodi M. The Effect of the Hydroalcoholic Extract of Persian shallot (*Allium hirtifolium Boiss*) on Albumin Glycation. *Journal of Shahrekord University of Medical Sciences*. 2016; 17(Suppl): 22-31.
- 23) Ahmadi Rad H, Hemmati M, Mahmoudi M, Sayadianari A, **Mirzaei MR**, Khoshdel A, Amiri M, MohammadainShahrbabaki F, Hajizadeh MR. Evaluating Blood Parameters and P53 and IL6 Gene Expression in Personnel of Copper Complex in Comparison with Control Group. *Journal of Fasa University of Medical Sciences*. 2016;.5(4):460-9.
- 24) Mohammadain Shahrbabaki F, Mahmoudi M, **Mirzaei MR**, Khoshdel A, SHEikhFathollahi M, Zinodini N, Hajizadeh MR. Expression of Some Genes Involved in Epigenetic in Breast Cancer Cell Lines: The Effect of Quercetin. *Journal of Fasa University of Medical Sciences*. 2015;.5(3):413-424.
- 25) **Mirzaei MR**, Mahmoodi M, Hajizadeh MR, Bagrezaei F, Bahramabadi R. OCT4B1 and its Role in Suppression of TRAF Family Gene Expression in Cancer Cell lines. *Community Health*. 2015; 9(1):27-36.
- 26) **Mirzaei MR**, Mahmoodi M, Hajizadeh MR, Bagrezaei F, Akbarpoor V, Bahramabadi R. The survey of curcumin effect on the expressional profile of OCT4, Nanog and Nucleostemin genes in AGS (adenocarcinoma) cancer cell line. *Community Health*. 2014; 8(1):19-27.
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zadeh A , Hassanshahi GR. Survey on the Effects of Different Concentrations of *Citrullus Colocynthis* Fruit Powder on Some of the Blood Biochemical Factors in Normal and Diabetic Male Rats. Rafsanjan Medical University journal.2013; 11(1,2):11-20.

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- 33) V Akbarpoor, F Bagrezaei, M Mahmoodi, MR Hajizadeh, M Sheikh Fathollahi, **MR Mirzaei**. The Survey of Saffron Extract Effects on Expressional Pattern of Some Self-renewal genes in AGS (gastric adenocarcinoma) Tumor Cell Line. *Community Health*. 2017; 10(4):66-75.
- 34) Rahim Heidari barchi, Fatemeh Asadi, **Mohammad Reza Mirzaei**, Seyyed Meysam Abtahi Froushani. Comparison of the effects of 17 $\beta$ - estradiol treated and untreated mesenchymal stem cells on ameliorating animal model of multiple sclerosis. *Iran J Basic Med Sci*, 2018;21(9): 936-942.
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- 36) **Mohammad Reza Mirzaei**, Shima Khajouee Ravari, Gholamhosein Hasanshahi, Mehdi Mahmoodi, Rahim Heidari barchi nezhad, Fatemeh Asadi. The Relationship between the Expression of Small Heat-Shock Proteins and Suppression of OCT4B1. *Journal of Kerman University of Medical Sciences*, 2018; 25 (2): 137-146.
- 37) **Mirzaei MR**, Hassanshahi GH, Mahmoodi M, Hajizadeh MR, Asadi F, Pooladvand V. OCT4B1 Suppression down Regulated BCL2 Gene Family Expression in Human Tumor Cell Lines. *International Journal of Cancer & Cellular Biology Research*. 2017; 2(1): 23-28.
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- Reza Mirzaei, Alireza Khoshdel, Zahra Hajializadeh, Mohammad Ali Fahmidehkar, Mahdi Mahmoodi. Neuroprotective and antihyperalgesic effects of orexin-A in rats with painful diabetic neuropathy. *Neuropeptides*. 2019;73:34-40.
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- 41) Farzaneh Sadat Hosseini<sup>1</sup>, Mojgan Noroozi Karimabad, Mohammad Reza Hajizadeh, Alireza Khoshdel, Soudeh Khanamani Falahati-Pour, Mohammad Reza Mirzaei, Seyed Mehdi Mirmohamadi<sup>1</sup>, Mehdi Mahmoodi. Evaluating of Induction of Apoptosis by Cornus mass L. Extract in the Gastric Carcinoma Cell Line (AGS). *Asian Pac J Cancer Prev*. 2018; 20 (1): 123-130.
- 42) Mahnaz Ramezani, Mahin Ramezani, Ali Darekordi, Gholamhossein Hassanshahi, Mohammad Reza Mirzaei. The New Compound of (2R, 4S)-N-(2, 5-difluorophenyl)-4- Hydroxy-1-(2, 2, 2-Trifluoroacetyl) Pyrrolidine-2-Carboxamide to Mediate the Expression of Some Apoptosis Genes by the HepG2 Cell Line. *Asian Pac J Cancer Prev*.2019; 20 (5): 1457-1462.
- 43) Rahim Heidari Barchi Nezhad, Fateme Asadi, Seyyed Meysam Abtahi Froushani, Gholamhossein Hassanshahi, Ayat Kaeidi, Soudeh Khanamani Falahati-pour, Zahra Hashemi, Mohammad Reza Mirzaei. The effects of transplanted mesenchymal stem cells treated with 17- $\beta$  estradiol on experimental autoimmune encephalomyelitis. *Molecular Biology Reports*.2019; <https://doi.org/10.1007/s11033-019-05048-3>.
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Khanamani Falahati-pour, Alireza Khoshdel, Mohammad Ali Fahmidehkar, **Mohammad Reza Mirzaei**, Mojgan Noroozi Karimabad, Mohammad Reza Hajizadeh. Trigonella foenum-graecum seed extract modulates expression of lipid metabolism related genes in HepG2 cells. Asian Pacific Journal of Tropical Biomedicine 2019; 9(6): 240-248. doi: 10.4103/2221-1691.260396

