



## Mohammad Reza Mirzaei

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PhD of molecular Genetics, Assistants professor in Rafsanjan University of Medical Sciences

### **Educations:**

**PhD 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. Rasaei, 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. KazemiArababadi, **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.
- 6) M. Mahmoodi, MR. Hajizadeh, HR. Reshidinejad, GR.Asadikaram, M. Khaksari, **MR. Mirzaei** and N. Seyedi. Survey of changes in complete blood count and red cell indices of whole blood incubated invitro at different temperatures up to 48 hours. J Ayub Med Coll Abbottabad. 2006; 18(1):17-21.
- 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  $\Delta 32$  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;

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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.

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H, Hajizadeh MR, Mohammadian F. The study of Effect of hydroalcoholic Extract of Aerial Parts of Scropholaria Striata on the Glucokinase Gene Expression in Type 1 Diabetic Rats. *Community Health*. 2013; 7(4):45-52.

29) **Mirzaei MR**, Mahmoodi M, Hasanshahi.GH, Ahmadi Z. Down-regulation of anti-apoptotic genes in tumor cell lines is facilitated by suppression of OCT4B1. *Advances in Medical Sciences* .2017; 62:97-102.

30) Taeb M, Mortazavi-Jahromi SS, Jafarzadeh A, **Mirzaei MR**, Mirshafiey A. An in vitro evaluation of anti-aging effect of guluronic acid (G2013) based on enzymatic oxidative stress gene expression using healthy individuals PBMCs. *Biomed Pharmacother*. 2017; 90:262-267.

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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.