

Curriculum Vitae

A-Personal information:

Name: Mehdi, **Surname:** Kadivar

Nationality: Iranian , **Date of Birth:** 1975

Marital status: married

Academic degree: Associate professor, Ph.D

Affiliation: Dept. of biochemistry, Pasteur institute of Iran , number 69, pasteur st. ,
Tehran –Iran, Postal code: 13164

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B-Experiences:

Teaching Experiences:

Biotechnology & Genetics for undergraduated Biology students in Tarbiat moalem university(2002 & 2003).

Advanced Biochemistry(Tissue engineering) for the Ph.D students in pasteur institute of iran (2006-2008).

Protein Chemistry(Amino acids) for the Ph.D students in pasteur institute of iran (2008-2016).

Advanced genetic engineering (Stem cells) for the Ph.D students in pasteur institute of iran (2008-2012).

Advanced molecular biology (Molecular buiology of the cancers) for the Ph.D students in pasteur institute of iran (2008-2016).

Cellular and molecular biology (cell cycle) for the Ph.D students in pasteur institute of iran (2008-2016).

Application of stem cells in medical biotechnology for the Ph.D students in pasteur institute of iran (2014-2016).

Technical ability:

Molecular biology Techniques: Cloning and Sub-cloning, mini-prep & maxi-prep plasmid extraction, Real time-PCR, mammalian cell & bacterial expression, site-directed mutagenesis, sequencing, library construction, Transfection, Electroporation, Hybridization and molecular evolution and etc.

Protein Structure & Function: Chromatography, Electrophoresis, Western Blot, Protein purification, Enzyme evolution, Fermentation.

Cell Biology: Cell culture, Stem Cell Isolation, Stem cell Differentiation, Optic & Microscopic Techniques and etc.

Immunology: Flowcytometry, Immunocytochemical Methods, ELISA, FISH and etc.

C- Education:

2001-2005

Pasteur institute of Iran

Ph.D in Medical Biotechnology

1999-2001

Tarbiat Modarres University , Tehran-Iran

M.Sc in molecular genetics

1995-1999

Ferdowsi University of Mashhad , Mashhad , Iran

B.Sc in Biology

D- Abstracts presented in conferences:

1- **Kadivar M**, Sadeghizadeh M. Analysis of VZV ORF 63: The significant of C-terminal and N-terminal in regulation of ORF 62, **5th Biophysical chemistry Seminar, Kerman,6-8 june 2001.**

2- **Kadivar M**, Sadeghizadeh M. Molecular studying of function of VZV ORF 29 on the VZV latency, **1st Iranian congress on applied biology,Mashhad .6-7 Feb 2001.**

3- **Kadivar M**, Sadeghizadeh M. Construction of recombinant plasmids for a DNA vaccine against Hepatitis B and studying of their in vitro and in vivo efficiencies, **2nd National Biotechnology Congress,karaj 9-11 october 2001.**

4- **Kadivar M**, kargar S, Nazem H, Fard-esfahani P. Evaluation of mesenchymal stem cells homing in bone marrow after transplantation in healthy and irradiated rats by PCR technique., **10th Iranian Genetics Congress, Tehran 21-23 May 2008.**

5- **Kadivar M**, Darvishi M. Isolation, culture and characterization of human synovium derived mesenchymal stem cells., **10th Iranian Genetics Congress, Tehran 21-23 May 2008.**

6- **Kadivar M**, Forghani N, Yagmaji P, Ghazizadeh L. The study of supporting role of rat mesenchymal stem cells in isolation and culture of mouse embryonic stem cells. **The 1st national conference of student Biology and Modern World, Gorgan 16-17 October 2008.**

7- **Kadivar M**, Ghazi zadeh L, Kargar S, Shokrgozar MA. Evaluation of human umbilical cord blood-derived mononuclear stem cells homing in healthy and irradiated rat's bone marrow by PCR. **The 2nd international student conference of Biotechnology, Tehran 15-17 November 2008.**

8- Farahmandfar M, Karimian SM, Naghdi N, Zarrindast MR, **Kadivar M**. The effect of morphine sensitization on reversal of morphine-induced spatial memory impairment in rats. **19th Iranian congress of Physiology and Pharmacology, Tehran, 3-6 November 2009.**

9- **Kadivar, M.**, Memari, N., Parivar, K, Fard-Esfahani, P. (2009). Insulin-producing cells can be achieved in vitro by direct transfection of mouse pdx-1 into rat mesenchymal stem cells. *Toxicology Letters*. Vol 189 (supplement 1), s61.

10- Farahmandfar M, Karimian SM, Naghdi N, Zarrindast MR, **Kadivar M**. Morphine sensitization increases extracellular GABA concentration in CA1 of dorsal hippocampus in male rats. **20th Iranian congress of Physiology and Pharmacology, Hamadan, 10-14 October 2011.**

11- N. Mohammadi Ghahhari1, **M. Kadivar**, A.R. Kamyab, M.T. Khorsandi Ashtiani, H. Mohammadi Ghahhari. CREB3 and STK11 show different gene expression profiles in benign and malignant salivary gland cancers. **The 12th International Congress of Human Genetics and the American Society of Human Genetics 61st Annual Meeting October 11-15, 2011 Montreal, Canada**

12- Vosough M, Omidinia E, **Kadivar M**, Shokrgozar MA, Aghdami N, Pournasr Khakbaz B, Baharvand H. Direct differentiation of suspended spheroid from of HIPSCS to endoderm progeny. **9th Annual meeting of ISSCR, Canada, 15-18 June 2011.**

13- **Kadivar Mehdi**, Haji Noor Mohammadi Ashkan, Kamyab Ahmad Reza. Evaluation of connexin 43 gene expression in mesenchymal stem cells preconditioned under hypoxia. *Clinical Biochemistry*, Volume 44, Issue 13, Supplement, September 2011, Pages S53-S54.

14- Kadivar Mehdi, Alijani Najva, Kamyab Ahmad Reza. Effect of hypoxia on CXCR4 gene expression in C57BL/6 mouse bone marrow derived mesenchymal stem cells. *Clinical Biochemistry*, Volume 44, Issue 13, Supplement, September 2011, Page S292.

15- Kadivar Mehdi, Rostami Massomeh. Association between Cox-2 promoter ;-765G>C polymorphism and gastric adenocarcinoma in Iranian patients. *Clinical Biochemistry*, Volume 44, Issue 13, Supplement, September 2011, Page S200.

16- Mehdi Kadivar, Maryam Farahmandfar, Faezeh Esmaeili Ranjbar, Reza Kamyab Ahmad. β -CamKII gene is up-regulated in the right lobe of dorsal hippocampus of male morphine sensitized rats. *Clinical Biochemistry*, Volume 44, Issue 13, Supplement, September 2011, Page S114.

E- Selected Publication:

- 1. Kadivar, M.**, Khatami, S., Mortazavi, Y., Soleimani, M., Taghikhani, M., Shokrgozar, M.A. (2005). Isolation, culture and characterization of postnatal human umbilical vein-derived mesenchymal stem cells. *DARU* 13, 170-176.
- 2. Kadivar, M.**, Khatami, S., Mortazavi, Y., Taghikhani, M., Shokrgozar, M.A. (2006). Multilineage differentiation activity by the human umbilical vein-derived mesenchymal stem cells. *Iranian Biomed. J.* 175-184.
- 3. Kadivar, M.**, Khatami, S., Mortazavi, Y., Shokrgozar, M.A., Taghikhani, M., Soleimani, M. (2006). In vitro cardiomyogenic potential of human umbilical vein-derived mesenchymal stem cells. *Biochem. Biophys. Res. Comm.* 340, 639-647.
- 4. Kadivar, M.**, Darvishi, M., Salehi Moghadam, M. (2009). Isolation, culture and characterization of human synovium derived mesenchymal stem cells. *Yakhteh.* Vol 11 (2), 160-167.
- 5. Kadivar, M.**, Piryaeei, F., Ramezani, M. (2009). Isolation, culture and differentiation of chicken bone marrow mesenchymal stem cells. *Armaghane Danesh.* Vol 14 (4), 1-11.
- 6. Kadivar, M.**, Memari, N., Parivar, K., Fard-Esfahani, P. (2009). Insulin-producing cells can be achieved in vitro by direct transfection of mouse pdx-1 into rat mesenchymal stem cells. *Toxicology Letters.* Vol 189 (supplement 1), s61.
- 7. Forghani, N., Kadivar, M.**, Yagmaei, P., Kargar, S, Ghazizadeh, L. (2009). Effects of rat mesenchymal stem cells as a feeder layer in isolation and

culture of mouse embryonic stem cells. *Journal of Semnan University of Medical Sciences*. Vol 10 (3), 161-169.

8. Farahmandfar, M., Karimian, M., Naghdi, N., Zarrindast, M.R., **Kadivar, M.** (2010). Morphine-induced impairment of spatial memory acquisition reversed by morphine sensitization in rats. *Behavioural Brain Research*. Vol 211, 156-163.
9. **Kadivar, M.**, Memari, N., Fard-Esfahani, P. (2010). Optimization and comparison of polyfect gene delivery method in three different kinds of mesenchymal stem cells. *Yakhteh*. Vol 12, 191-198.
10. **Kadivar, M.**, Kargar, S., (2010). Implantation of systemically infused mesenchymal stem cells in rat's bone. *Feyz, Journal of Kashan University of Medical Sciences*. Vol 14, 92-98.
11. **Kadivar, M.**, Piryaeei, F., Ramezani, M. (2010). Comparison of the differentiation potential of human mesenchymal stem cells and several animal species. *Journal of Semnan University of Medical Sciences*. Vol 11(4): 270-279.
12. **Kadivar, M.**, Ghazi zadeh, L. (2011) A study of graft possibility of human umbilical cord blood mononuclear cells into irradiated rat's bone marrow. *Journal of Semnan University of Medical Sciences*. Vol 12(4): 455-461.
13. Farahmandfar, M., Karimian, M., Zarrindast, M.R., **Kadivar, M.**, Afrouzi H., Naghdi, N., (2011) Morphine sensitization increases the extracellular level of glutamate in CA1 of rat hippocampus via μ -opioid receptor. *Neuroscience letters*, 494,130-134.
14. Farahmandfar, M., Zarrindast, M.R., **Kadivar, M.**, Karimian, M., Naghdi, N. (2011) The effect of morphine sensitization on extracellular concentrations of GABA in dorsal hippocampus of male rats. *European journal of pharmacology*, 669,66-70.
15. Fard-Esfahani, P., Kadivar, M., Allahyari, M., Mirkhani, F. (2011) Gene Expression under F8 Promoter Driving In Mouse Hepatoma Cells: A Step towards Gene Therapy of Hemophilia. *Iranian Journal of Pathology* (2011) 6(4): 173-178.
16. Farahmandfar, M., Naghdi, N., Karimian, M., **Kadivar, M.**, Zarrindast, M.R. (2012). Amnesia induced by morphine in spatial memory

retrieval inhibited in morphine-sensitized rats. *European journal of pharmacology*, 683,132-139.

17. Rostami, M., Kadivar, M., Aznab, M., Abachi, M. (2012) Influence of age and gender on association between -765G > C COX-2 genetic polymorphism and gastric adenocarcinoma risk: a case-control study in Iran. *Gastroenterol Hepatol Bed Bench*;5(1):29-34.
18. Kadivar, M., Masoumi Ganjgah, F. (2012) Effects of %1 acute hypoxia on gene expression of connexin43 and CXCR4 in human bone marrow derived mesenchymal stem cells. *Journal of Semnan University of Medical Sciences*. Vol 13(3): 382-389.
19. Nastaran M. Ghahhari, Hamed M. Ghahhari, Mehdi Kadivar. GSK3 β and CREB3 Gene Expression Profiling in Benign and Malignant Salivary Gland Tumors. *Iranian Biomedical Journal* 16 (3): 140-144 (July 2012).
20. Mohammadi Ghahhari, N., Mohammadi Ghahhari, H., Kadivar, M. (2012) Could a crosstalk between AMPK and TGF- β signaling pathways be a key player in the benign and malignant salivary gland tumors? *Onkologie*. 2012;35:770–774
21. Massoud Vosough, Eskandar Omidinia, Mehdi Kadivar, Mohammad Ali Shokrgozar, Behshad Pournasr, Nasser Aghdami, Hossein Baharvand. Generation of functional hepatocyte-like cells from human pluripotent stem cells in a scalable suspension culture. *Stem Cells and Development*, 22, 20 (2013), 1-13.
22. Zahra Zamani, Nassir-UD-Din, Halimeh Kabini Kohan, Mehdi Kadivar, Zahrea Kalaei, Behzad Laame Rad, Ayda Iravani, Nourooz Ali Rahimi, Farideh Wahabi, Sedigheh Sadeghi, Fatemeh Pourfallah, Mohammad Ali Arjmand. The effect of ginger on glycoproteins of Raji cells. *Pakistan Journal of Biological Sciences*, (2013).
23. Maryam Farahmandfar, Mehdi Kadivar, Nasser Naghdi, Samira Choopani, Mohammad-Reza Zarrindast. Influence of pre-exposure to morphine on cannabinoid-induced impairment of spatial memory in male rats. *Behavioural Brain Research*, 256 (2013) 157-164.
24. Saman Rahmati, Najva Alijani, Mehdi Kadivar. In vitro generation of glucose-responsive insulin producing cells using lentiviral based pdx-1 gene transduction of mouse (C57BL/6)

mesenchymal stem cells. *Biochemical and Biophysical Research Communications*. 437 (2013) 413-419.

25. Masoumeh Rostami, Zahra Kalaei, Mohamad Amin Pourhoseingholi, Mehdi Kadivar. Study on association between H-ras gene polymorphism and gastric adenocarcinoma risk. *Gastroenterology and Hepatology From Bed to Bench*. 6, 3 (2013) 146-151.
26. Shima Habibi, Hassan Jamshidian, Mahdi Kadivar, Mohammad Reza Eshraghian, Mohammad Hassan Javanbakht, Hoda Derakhshanian, Mahnaz Zarei, Mahmoud Djalali. A study of lipid- and protein- bound sialic acids for the diagnosis of bladder cancer and their relationships with the severity of malignancy. *Reports of Biochemistry and Molecular Biology*. 2, 2 (2014).
27. Mehdi Kadivar, Maryam Farahmandfar, Faezeh Esmaeli Ranjbar, Mohammad-Reza Zarrindast. Increased calcium/calmodulin-dependent protein kinase II activity by morphine-sensitization in rat hippocampus. *Behavioural Brain Research*. 267 (2014) 74-82.
28. Mehdi Kadivar, Najva Alijani, Maryam Farahmandfar1, Saman Rahmati, Nastaran Mohammadi Ghahhari, Reza Mahdian. Effect of acute hypoxia on CXCR4 gene expression in C57BL/6 mouse bone marrow-derived mesenchymal stem cells. *Advanced Biomedical Research*. DOI: 10.4103/2277-9175.145682 (2014).
29. Maryam Farahmandfar, Mehdi Kadivar, NasserNaghdi. Possible interaction of hippocampal nitric oxide and calcium/calmodulin-dependent protein kinase II on reversal of spatial memory impairment induced by morphine. *European Journal of Pharmacology*. 751 (2015) 99-111.
30. Mohammad KHALAJ-KONDORI, Mahboobeh KAVOOSI, Mohammad RAHMATI-YAMCHI, Mehdi KADIVAR. Preparation of a transferrin-targeted M13-based gene nanocarrier and evaluation of its efficacy for gene delivery and expression in eukaryote cells. *Turkish Journal of Biology*, doi:10.3906/biy-1503-16. (2016).
31. Majid Lotfinia, Shirin Lak, Nastaran Mohammadi Ghahhari, Behrooz Johari, Faezeh Maghsood, Sara Parsania, Bahareh Sadegh

Tabrizi and Mehdi Kadivar. Hypoxia Pre-Conditioned Embryonic Stem Cell-Mesenchymal Stem Cell Secretome Reduced IL-10 Production by Peripheral Blood Mononuclear Cells. Iranian Biomedical Journal. Accepted.

F- Awards and scholarships:

Awarded as the best educated student among the Biology students in the year 1999 by the Ferdowsi University of Mashhad.

Awarded as the holder of the highest score among all of the accepted MSc students in all of the biological fields in the year 1999 by the Ministry of Science, research and technology.

Awarded as the best educated student among the Genetics students in the year 2001 by the Tarbiat Modares University.

Awarded as one of the best educated students among the Ph.D students of Pasteur Institute of Iran in 2004.

Scholarship awarded by the Iranian Ministry of Health for a six month period to work on stem cells as a visiting scientist with Prof. Stuart Forbes at the school of Medicine, Imperial college, London, UK in 2005.

Awarded as one of the best selected researchers in Pasteur Institute of Iran in 2006.

Honorary Diploma of best selected research in Medical Sciences from The academy of medical sciences of Islamic republic of Iran in 2008.