



# ABSTRACT BOOK



**Central Asia Genomics**

**1<sup>st</sup> Central Asia Genomics Symposium**

**09-10 December, 2021**

№	<b>CONTENT</b>	Page
	<b>Human, animal and related abstracts</b>	
1	Primers design for genotyping of Hepatitis C <i>Nasriddinov Kh.Z, Abdurahimov S.A., Alimukhamediva O.B., Baimirzaev A.B., Ikramov S.A., Lysova E. M. ....</i>	21
2	Pharmacological importance of painkillers and their effects on patients <i>Ibragimov O., Rustam X. ....</i>	22
3	Analysis of immune cell activation after interaction with melanoma cell membrane vesicles <i>Filin I.Y., Kitaeva K.V., Chulpanova D.S., Solovyeva V.V., Rizvanov A.A.....</i>	23
4	The frequency and typing of HPV virus among suspected women referred to HPV genotyping test in Mazandaran, north of Iran <i>Elahe Hosseini.....</i>	24
5	Frequencies of CYP2B6*4,*5, and *6 alleles within an Iranian population (Mazandaran) <i>Elahe Hosseini.....</i>	25
6	Difference of episodic and chronic migraine in 1911a>G single nucleotide polymorphism of Trpv1 gene as possible biomarker of genetic predisposition to migraine chronification <i>A.Yakubova.....</i>	26
7	Development of a gene and gene-cell preparation for the treatment of metachromatic leukodystrophy <i>Aisyly Mullagulova.....</i>	27
8	Development of the allele-specific pcr method for studying insulin gene rs689 polymorphism <i>Saatov T.S., Ibragimov Z.Z., Alimov T.R., Ibragimova E.A., Ishankhodjaev T.M., Shamansurova Z.M., Karimov Kh.Y., Azimova Sh.S., Boboev K.T., Makhnyov A.A.....</i>	28
9	Associations of rs1799750 polymorphism in the mmp1 gene with the development of lower extremity varicose veins and thrombotic complications <i>Yariev A.A., Khudoyberdiev, S.S., Boboev, K.T., Mominov, Sh.M., Alimov, T.R.....</i>	29
10	In silico study of interaction of miRNAs and genes responsible for the development of borderline and oncological diseases of the gastrointestinal tract <i>Baimaganbetova M.M., Kurbangalieva T.A., Niyazova R.Ye.....</i>	30
11	Cytochalasin B-induced membrane vesicles isolated from mesenchymal stem cells with IL2 overexpression can activate human CD8+ T-killers <i>Chulpanova D.S., Pukhalskaia T.V., Rizvanov A.A., Solovyeva V.V.....</i>	31

## Primers design for genotyping of Hepatitis C

Nasriddinov Kh.Z.<sup>1</sup>, Abdurahimov S.A.<sup>1,2</sup>, Alimukhamediva O.B.<sup>1</sup>, Baimirzaev A.B.<sup>1</sup>, Ikramov S.A.<sup>1</sup>, Lysova E. M.<sup>1</sup>

<sup>1</sup>*Acad. S.Yu. Yunusov Institute of the Chemistry of Plant Substances Academy of Sciences of the Republic of Uzbekistan*

<sup>2</sup>*The National University of Uzbekistan named after Mirzo Ulugbek*

### Abstract

The determination of the genetic and sub genetic specificity of Hepatitis C virus (HCV) is crucial for diagnosis. Treatment depends on the genotype of the HCV. HCV is a highly variable retrovirus due to instability of the RNA genome and high rate of mutations in genetic material. In this way, application of biochemical and immunological tests is insufficient to distinguish the genetic and sub genetic specificity. Consequently, genetic tools are essential for accurate diagnosis and treatment, and the PCR method allows completing specific diagnoses. We developed a set of reagents for real-time PCR diagnosing the HCV in human plasma. For this, we analyzed the genome of six genotypes of HCV to identify conservative regions suitable for primer construction. The nucleotide sequence of HCV was taken from an open source database (NCBI). Based on the analysis we designed and synthesized primers and a fluorescent probe for six genotypes. The sensitivity and specificity of a set of reagents were investigated on clinical blood plasma samples.

**Keywords:** Polymerase chain reaction, primers design, HCV, molecular diagnostic, genotype, genetic material, nucleotide sequence