recognized by plant RNA polymerase so we measured 14,000 RLU/sec after 5 days of transfection.

Keywords: Cytomegalovirus Promoter, Luciferase, Cloning, In vivo assa.

Abstract No.217

QSAR Study of Neuraminidase Enzyme by Molecular Mechanic Method, for Nano Drug Design

*Reza Rasoolzadeh**, *Maryam Mousavi*

Science and Research Branch, Islamic Azad University, Tehran, IR
(E-mail: reza.rasoolzadeh@yahoo.com)

Nowadays drug design is made by two methods namely QSAR & Docking.QSAR reveals a quantitative relation between structure & function based onHamt & Hansh equations. Statistical analysis ,molecular mechanics &molecular graphics have done a great assistance in drug designing. For thepurpose of understanding of drug designing methods we should have a complete knowledge of Receptor, Ligand, Binding site & Target site.Since H1N1 influenza A infection is highly contagious ,its spread as epidemics& pandemics has made it a horrible disease.The WHO has many concerns inthis issue & expends millions of dollars to produce drugs to suppress or treatthis disease.For treatment of this disease a thorough knowledge of neuroaminidase protein is essential in order to produce potent drugs to suppress this enzyme. Due to virus's genomic inconstancy & point mutations, drugs that are no longer useful against this virus should not be used & new more potent & suppressing drugs must be designed .We studied the drug binding sites in dielecterics(32,63&78,39) in varioustemperatures(310,315,329&333 K), using Bioinformatics ,molecular mechanics & MM+ Mont carlo methods.We measured the potential energy of amino acids binding to the drug. Drugbinding sites are mor dependant to dielectric constants rather to temperature and the optimum dielectric constsnt is 39/78.

Keywords: Molecular mechanic, Influenza A, Dielectric, Neuraminidase enzyme.

Abstract No.218

Nano Theoretical Studies of Testis-Specific Protein/gene 10 structure of Homo Sapiens and its Comparison with the TSGA10 protein/gene of Rattus Norvegicus

Padina Vaseqi maqvan, *Reza Rasoolzadeh**

Science and Research Branch, Islamic Azad University, Tehran, IR
(E-mail: reza.rasoolzadeh@yahoo.com)

The isolation of a novel gene, TSGA10,is described by differential mRNA display which is expressed solely in adult human testis. It seems likely that the gene is expressed during spermatogenesis possibly in spermatocytes. The gene is composed of 19 exons extending over more than 80 kb. The complete cDNA contains an open reading frame of 2094 nucleotides, which appears to encode a novel protein. It was predominantly expressed in the testis in adult normal tissues.Cancer-testis genes are a group of genes expressed in testicular germinal cells and a range of human cancers. Testis-specific gene A10 (TSGA10) is expressed in testis and actively dividing and fetal differentiating tissues. Testis-specific gene antigen (TSGA10) is expressed in fetus, testis and frequently in human solid cancers and acute leukemias, making it a candidate for immunotherapy. There is also evidence for potential TSGA10 involvement in cell proliferation.It was reported its expression TSGA10 in human monocyte-derived dendritic cells (DC) and macrophages in vitro and in murine spleen CD11c(+) cells ex vivo. It is proposed that TSGA10 could influence the function of antigen presenting cells (APC) via its interaction with cytoskeletal proteins such as vimentin.Autoimmune polyendocrine syndrome type 1 (APS1) is a rare monogenic autosomal recessive disorder.We used the methods geometry optimization, Molecular Dynamics , Langevin Dynamics and Monte carlo and The force fields are MM,AMBER,BIO(charmm) and OPLS and temperatures are 295,300,305,310,315.By these methods were evaluated and significat results were obtaind.

Keywords: TSGA10 protein, TSGA10 gene, Molecular Dynamics, Geometry Optimization, Charmm.

Abstract No.219

Nano Study and Simulation of the Na+/k+ Channels Proteins Membrane, Using MD/MM Methods

Naghmeh Ezzati, *Reza Rasoolzadeh**

Science and Research Branch, Islamic Azad University, Tehran, IR
(E-mail: reza.rasoolzadeh@yahoo.com)

Sodium channels are integral membrane proteins the form ion channelsconducting sodium ions through a cell,s plasma membrane . the voltagesensitivity of this channel is due to positive amino acids located of every third position voltage gated sodium channels have