

رتبه دوم خارجی
Foreign Second Winner



Project Title:

Expression of Human and other Eukaryotic Genes in Heterologous Hosts

Researcher:

Ivan Ivanov (Ph.D.)

Country:

Bulgaria

University:

Bulgarian Academy of Science

عنوان طرح:

بیان ژن انسانی در پذیرنده های غیر متجانس

محقق:

دکتر ایوان ایوانوف

کشور:

بلغارستان

دانشگاه:

آکادمی علوم بلغارستان

Abstract:

Various genes coding for biologically active proteins have been either chemically synthesized or derived from genomic DNA.

They were successfully expressed in either bacteria or higher plants (potato). The aim of the these studies were to reveal factors affecting expression of foreign genes in heterologous hosts and (II) to construct highly productive recombinant bacteria and transgenic plants to be used for manufacturing of new generation of pharmaceuticals.

The most important achievements have been I) A new non-shine-Dalgarno (non-SD), mechanism of translation initiation in bacteria is found and numerous non-SD initiators and enhancers of translation are discovered II) A new process, non-enzymatic glycosylation of proteins in bacteria is for the first time described. He has contributed to more than 100 papers and 6 books and one patent.